ARUP LABORATORIES

HOTLINE: Effective May 18, 2020

MEDICARE COVERAGE OF LABORATORY TESTING

Please remember when ordering laboratory tests that are billed to Medicare/Medicaid or other federally funded programs, the following requirements apply:

1. Only tests that are medically necessary for the diagnosis or treatment of the patient should be ordered. Medicare does not pay for screening tests except for certain specifically approved procedures and may not pay for non-FDA approved tests or those tests considered experimental.
2. If there is reason to believe that Medicare will not pay for a test, the patient should be informed. The patient should then sign an Advance Beneficiary Notice (ABN) to indicate that he or she is responsible for the cost of the test if Medicare denies payment.
3. The ordering physician must provide an ICD-10 diagnosis code or narrative description, if required by the fiscal intermediary or carrier.
4. Organ- or disease-related panels should be billed only when all components of the panel are medically necessary.
5. Both ARUP- and client-customized panels should be billed to Medicare only when every component of the customized panel is medically necessary.
6. Medicare National Limitation Amounts for CPT codes are available through the Centers for Medicare & Medicaid Services (CMS) or its intermediaries. Medicaid reimbursement will be equal to or less than the amount of Medicare reimbursement.

The CPT Code(s) for test(s) profiled in this bulletin are for informational purposes only. The codes reflect our interpretation of CPT coding requirements, based upon AMA guidelines published annually. CPT codes are provided only as guidance to assist you in billing. ARUP strongly recommends that clients reconfirm CPT code information with their local intermediary or carrier. CPT coding is the sole responsibility of the billing party.

The regulations described above are only guidelines. Additional procedures may be required by your fiscal intermediary or carrier.

Hotline Page #	Test Number	Summary of Changes by Test Name	Name Change	Methodology	Performed/Reported Schedule	Specimen Requirements	Reference Interval	Interpretive Data	Note	CPT Code	Component Change	Other Interface Change	New Test	Inactive
9	2011431	ALK (D5F3) by Immunohistochemistry with Reflex to *ALK* Gene Rearrangements by FISH			x	x								
10	2007324	ALK (D5F3) with Interpretation by Immunohistochemistry				x								
10	3001720	Allergen, Region 10 Respiratory Panel IgE, Southwestern Grasslands (OK, TX)	x											
10	3001721	Allergen, Region 11 Respiratory Panel IgE, Rocky Mountain (AZ, ID, NM, WY, CO, MT, UT)	x											
10	3001722	Allergen, Region 12 Respiratory Panel IgE, Arid Southwest (S. AZ, S.E. CA)	x											

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10	3001723	Allergen, Region 13 Respiratory Panel IgE, Southern Coastal (CA)	x											
10	3001724	Allergen, Region 14 Respiratory Panel IgE, Central California (CA)	x											
10	3001725	Allergen, Region 15 Respiratory Panel IgE, Intermountain West (NV, S. ID)	x											
10	3001726	Allergen, Region 16 Respiratory Panel IgE, Inland Northwest (OR, Central and East WA)	x											
10	3001727	Allergen, Region 17 Respiratory Panel IgE, Pacific Northwest (NW CA, W. OR, WA)	x											
11	3001728	Allergen, Region 18 Respiratory Panel IgE, Alaska	x											
11	3001729	Allergen, Region 19 Respiratory Panel IgE, Puerto Rico	x											
11	3001712	Allergen, Region 2 Respiratory Panel IgE, Mid-Atlantic (DE, MD, VA, DC, NC)	x											
11	3001730	Allergen, Region 20 Respiratory Panel IgE, Hawaii	x											
11	3001713	Allergen, Region 3 Respiratory Panel IgE, South Atlantic (GA, SC, N.FL)	x											
11	3001714	Allergen, Region 4 Respiratory Panel IgE, Subtropic Florida (S. of Orlando)	x											
11	3001715	Allergen, Region 5 Respiratory Panel IgE, Ohio Valley (IN, OH, TN, WV, KY)	x											
11	3001716	Allergen, Region 6 Respiratory Panel IgE, South Central (AL, AR, LA, MS)	x											
11	3001717	Allergen, Region 7 Respiratory Panel IgE, Northern Midwest (MI, WI, MN)	x											
11	3001718	Allergen, Region 8 Respiratory Panel IgE, Central Midwest (IL, MO, IA)	x											
11	3001719	Allergen, Region 9 Respiratory Panel IgE, Great Plains (KS, NE, ND, SD)	x											
12	0050529	Allergens, Pediatric Allergy, March (Progression) Profile IgE				x								
12	0098974	Angiotensin Converting Enzyme, CSF				x			x					
12	3002477	Anti-gp210 Antibody, IgG											x	
12	0060201	Antimicrobial Susceptibility - MIC, Individual								x				
13	3002482	Anti-sp100 and anti-gp210 Antibodies, IgG											x	
14	3002478	Anti-sp100 Antibody, IgG											x	
14	2001594	Arbovirus Antibodies, IgG and IgM, Serum				x								
14	2001593	Arbovirus Antibodies, IgG, Serum				x								
14	2001592	Arbovirus Antibodies, IgM, Serum				x								

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78	2007210	Autoimmune Liver Disease Evaluation with Reflex to Smooth Muscle Antibody (SMA), IgG by IFA												x
15	3002479	Autoimmune Liver Disease Reflexive Panel											x	
16	3002582	Bacterial Vaginosis by TMA											x	
16	0050106	*Bartonella quintana* Antibodies, IgG & IgM by IFA				x								
17	0050094	*Bartonella quintana* Antibody, IgG by IFA				x								
17	0050093	*Bartonella quintana* Antibody, IgM by IFA				x								
17	3001798	Blastomyces Antigen Quantitative by EIA, Urine				x								
17	3000231	*Blastomyces dermatitidis* Antibodies by EIA with Reflex to Immunodiffusion, CSF				x								
17	3000236	*Blastomyces dermatitidis* Antibodies by EIA with Reflex to Immunodiffusion, Serum				x								
18	0060108	Body Fluid Culture and Gram Stain			x				x					
18	0060103	Bone Culture and Gram Stain			x				x					
18	0051750	*BRAF* Codon 600 Mutation Detection with Reflex to *MLH1* Promoter Methylation									x			
18	0060700	Bronchoscopy Culture and Gram Stain			x				x					
18	0050135	*Brucella* Antibody (Total) by Agglutination				x								
18	0060159	*Brucella* Culture			x									
19	3002583	Candida glabrata, Candida species, and Trichomonas vaginalis by TMA											x	
19	0060106	Cerebrospinal Fluid (CSF) Culture and Gram Stain			x				x					
20	2011164	*Chlamydia trachomatis* and *Neisseria gonorrhoeae* (CTNG) by Transcription-Mediated Amplification (TMA) with Reflex to CT/NG Confirmation				x								
20	0060241	*Chlamydia trachomatis* and *Neisseria gonorrhoeae* by Transcription-Mediated Amplification (TMA)				x								
21	0060243	*Chlamydia trachomatis* by Transcription-Mediated Amplification (TMA)				x								
22	3001858	Chronic Lymphocytic Leukemia (CLL) Mutation Panel by Next Generation Sequencing											x	
23	3002508	Clobazam and Metabolite, Quantitative, Serum or Plasma											x	
78	2008597	Clobazam Quantitative, Serum or Plasma												x
23	0050137	*Coccidioides* Antibodies, IgG and IgM by ELISA				x								
23	3000057	*Coccidioides* Antibodies, IgG and IgM by ELISA, CSF				x								
24	0050170	*Coccidioides* Antibody by CF				x								
24	3000055	*Coccidioides* Antibody IgG ELISA, CSF				x								

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24	3000056	*Coccidioides* Antibody IgM ELISA, CSF				x								
24	0050179	*Coccidioides* Antibody, IgG by ELISA				x								
24	0050178	*Coccidioides* Antibody, IgM by ELISA				x								
25	0050183	*Coccidioides immitis* Antibodies by Immunodiffusion				x								
78	0050198	Complement Activity Enzyme Immunoassay, Total												x
25	3002575	Complement Activity Total, (CH50)											x	
25	0099073	Complement Component 7			x	x								
26	3002463	Connective Tissue Disease First Line Panel with Reflex											x	
27	2012634	*Coxiella burnetii* (Q-Fever) Antibodies, IgG and IgM, Phase I and II with Reflex to Titer				x								
27	2012625	*Coxiella burnetii* (Q-Fever) Antibody IgG, Phase I and II with Reflex to Titer				x								
27	0050181	C-Reactive Protein, Neonatal				x								
27	2013664	Cystic Fibrosis (*CFTR*) 165 Pathogenic Variants with Reflex to Sequencing and Reflex to Deletion/Duplication				x								
28	3001524	Cytochrome P450 Genotyping Panel			x	x					x			
29	3002601	Cytokine Panel 13, Plasma											x	
30	0051394	Cytokine Panel 13, Serum	x			x	x		x			x		
31	3002616	Cytokine Panel, Monokines, Plasma											x	
32	0051524	Cytokine Panel, Monokines, Serum	x			x	x		x			x		
33	3002617	Cytokine Panel, TH1, Plasma											x	
34	0051408	Cytokine Panel, TH1, Serum	x			x	x		x			x		
35	3002627	Cytokine Panel, TH2, Plasma											x	
36	0051518	Cytokine Panel, TH2, Serum	x			x	x		x			x		
36	2000133	Cytology, SurePath Liquid-Based Pap Test and Human Papillomavirus (HPV), High Risk with 16 and 18 Genotype by PCR, SurePath. (for routine co-testing in women over 30)	x						x			x		
36	2000135	Cytology, SurePath Liquid-Based Pap Test with Reflex to Human Papillomavirus (HPV), High Risk with 16 and 18 Genotype by PCR, SurePath	x						x			x		
37	2000136	Cytology, ThinPrep Pap Test and Human Papillomavirus (HPV), High Risk by Transcription-Mediated Amplification (TMA) with Reflex to HPV Genotypes 16 and 18/45 by TMA, ThinPrep (for routine co-testing in women over 30)	x						x	x		x		

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37	2000138	Cytology, ThinPrep Pap Test with Reflex to Human Papillomavirus (HPV), High Risk by Transcription-Mediated Amplification (TMA) with Reflex to HPV Genotypes 16 and 18/45 by TMA, ThinPrep	x						x	x		x		
78	0090085	Digitoxin												x
37	3002537	Digitoxin Quantitative, Serum or Plasma											x	
78	2011632	Disopyramide, Serum or Plasma												x
38	0060361	Ear Culture and Gram Stain			x				x					
38	0051002	*Ehrlichia chaffeensis* Antibodies, IgG & IgM by IFA				x								
38	0051004	*Ehrlichia chaffeensis* Antibody, IgG by IFA				x								
38	0051003	*Ehrlichia chaffeensis* Antibody, IgM by IFA				x								
38	2007332	ERBB2 (HER2) (HercepTest)™ by Immunohistochemistry				x								
39	0049178	*ERBB2* (*HER2*/*neu*) (HercepTest) by Immunohistochemistry, Tissue with Reflex to FISH if 2+			x	x								
39	0049174	*ERBB2* (*HER2*/*neu*) (HercepTest) with Interpretation by Immunohistochemistry, Tissue				x								
39	2004516	Estrogen Receptor (ER) by Immunohistochemistry				x								
40	0049210	Estrogen/Progesterone Receptor with Interpretation by Immunohistochemistry				x								
40	0060142	Eye Culture and Gram Stain			x				x					
78	2007209	F-Actin and Mitochondrial M2 Antibodies, IgG by ELISA with Reflex to Smooth Muscle Antibody (SMA), IgG by IFA												x
40	2008476	Fluoroquinolone-Resistant Organism, Culture			x									
41	3001981	Comprehensive Heart Biopsy Workup											x	
78	2004331	HIV GenoSure MG												x
42	3002061	HLA Class I and II Panel (A,B,C,*DRB1*, *DQA1*, *DQB1*, *DPB1*) by Next Generation Sequencing											x	
43	3002062	HLA Class I and II Panel (A,B,C,*DRB1*, *DRB345*, *DQA1*, *DQB1*, *DPA1*, *DPB1*) by Next Generation Sequencing											x	
78	2011264	HLA Class I Panel (ABC) by Next Generation Sequencing												x
44	3002307	HLA Class I Panel (ABC) by Next Generation Sequencing											x	
78	2011272	HLA Class II Panel (DRB1 and *DQB1*) by Next Generation Sequencing												x

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45	3002308	HLA Class II Panel (*DRB1, DQA1* and *DQB1*) by Next Generation Sequencing											x	
78	2010808	Human Immunodeficiency Virus Type 1 (HIV-1) Drug Resistance (PhenoSense GT Plus Integrase)												x
46	3002503	Human Immunodeficiency Virus Type 1 (HIV-1) GenoSure Archive											x	
46	3001242	Human Immunodeficiency Virus Type 1 (HIV-1) GenoSure MG											x	
47	3000882	Human Immunodeficiency Virus Type 1 (HIV-1) PhenoSense											x	
47	3001186	Human Immunodeficiency Virus Type 1 (HIV-1) PhenoSense GT Plus Integrase											x	
48	3002008	Human Papillomavirus (HPV) High Risk by in situ Hybridization, Paraffin				x								
48	3002009	Human Papillomavirus (HPV) Low Risk by in situ Hybridization, Paraffin				x								
78	2011942	Human Papillomavirus (HPV), High Risk by PCR, SurePath												x
78	2011947	Human Papillomavirus (HPV), High Risk by PCR, ThinPrep												x
48	2011933	Human Papillomavirus (HPV), High Risk with 16 and 18 Genotype by PCR, SurePath (Pricing Change Only)												
48	2011940	Human Papillomavirus (HPV), High Risk with 16 and 18 Genotype by PCR, ThinPrep (Pricing Change Only)												
48	3000202	5-Hydroxyindoleacetic acid (5-HIAA), Plasma			x									
48	0050049	Immunofixation Electrophoresis, Immunoglobulin D and Immunoglobulin E, Serum			x	x								
49	2012572	Immunofixation Electrophoresis, Serum	x		x	x						x		
49	3002628	Interferon gamma, Plasma											x	
50	0051531	Interferon gamma, Serum	x			x	x		x			x		
50	3002629	Interleukin 1 beta, Plasma											x	
51	0051536	Interleukin 1 beta, Serum	x			x	x		x			x		
51	3002623	Interleukin 10, Plasma											x	
52	0051534	Interleukin 10, Serum	x			x	x		x			x		
52	3002624	Interleukin 12, Plasma											x	
53	0051530	Interleukin 12, Serum	x			x	x		x			x		
53	3002625	Interleukin 13, Plasma											x	
54	0051535	Interleukin 13, Serum	x			x	x		x			x		

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54	3002626	Interleukin 17, Plasma											x	
55	2013115	Interleukin 17, Serum	x			x	x		x			x		
55	3002631	Interleukin 2 Receptor, Soluble, Plasma											x	
56	0051529	Interleukin 2 Receptor, Soluble, Serum	x			x	x		x			x		
56	3002630	Interleukin 2, Plasma											x	
57	0051588	Interleukin 2, Serum	x			x	x		x			x		
57	3002622	Interleukin 4, Plasma											x	
58	0051532	Interleukin 4, Serum	x			x	x		x			x		
58	3002621	Interleukin 5, Plasma											x	
59	0051533	Interleukin 5, Serum	x			x	x		x			x		
59	3002620	Interleukin 6, Plasma											x	
60	0051537	Interleukin 6, Serum	x			x	x		x			x		
60	3002619	Interleukin 8, Plasma											x	
61	0051538	Interleukin 8, Serum	x			x	x		x			x		
61	3001866	Krebs von den Lungen-6			x									
61	3001780	Leukemia/Lymphoma Phenotyping Evaluation by Flow Cytometry							x					
61	3001321	Lymphocyte Proliferation, Mitogen Induced, by Flow Cytometry (48-Hr Critical Room Temp)	x											
62	3002539	Lymphoid Enhancing Factor 1 by Immunohistochemistry											x	
62	0049302	Mismatch Repair by Immunohistochemistry				x								
78	0050615	Monoclonal Protein Detection Quantitation and Characterization, SPEP, IFE, IgA, IgG, IgM, Serum												x
62	2002715	Monoclonal Protein Study, Expanded Panel, Serum	x											
63	3002568	Monoclonal Protein Study, Serum											x	
78	2002294	Multiple Myeloma Panel by FISH												x
64	3002063	Multiple Myeloma Panel by FISH											x	
65	0060244	*Neisseria gonorrhoeae* by Transcription-Mediated Amplification (TMA)				x								
65	0065122	Parvovirus B 19 Antibody, IgM				x	x							
66	0065120	Parvovirus B19 Antibodies, IgG and IgM				x	x							
66	0065121	Parvovirus B19 Antibody, IgG				x	x							
78	2012130	Phosphatidylethanol (PEth)												x
67	3002598	Phosphatidylethanol (PEth), Whole Blood, Quantitative											x	

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68	3002480	Primary Biliary Cholangitis Panel											x	
69	2004525	Progesterone Receptor (PR) by Immunohistochemistry				x								
69	0070112	Proinsulin, Intact				x								
69	0070256	Proinsulin, Intact/Insulin Ratio				x								
69	2002109	Protein Electrophoresis with Reflex to Immunofixation, Serum	x		x	x								
70	0050640	Protein Electrophoresis, Serum			x	x								
70	2007443	Rapid Plasma Reagin (RPR) with Reflex to RPR Titer or *T. pallidum* Antibody by Particle Agglutination				x								
70	0050471	Rapid Plasma Reagin (RPR) with Reflex to Titer				x								
70	0050478	Rapid Plasma Reagin (RPR) with Reflex to Titer and TP-PA Confirmation				x								
71	3002514	Reducing Substances - Fecal											x	
78	0020373	Reducing Substances, Fecal												x
71	0060122	Respiratory Culture and Gram Stain			x				x					
78	2007085	Retinitis Pigmentosa/Leber Congenital Amaurosis Panel, Sequencing and Deletion/Duplication												x
71	2008414	ROS1 with Interpretation by Immunohistochemistry with Reflex to FISH if Equivocal or Positive			x									
71	0080397	Serotonin, Serum				x								
72	2006258	Sexually Transmitted Disease Panel 1 by Transcription-Mediated Amplification				x								
72	0091229	Silver, Whole Blood				x								
72	0060134	Stool Culture and *E. coli* Shiga-like Toxin by EIA			x									
72	0060135	Stool Culture, *Campylobacter*			x									
72	0060136	Stool Culture, *Vibrio*			x									
72	0060137	Stool Culture, *Yersinia*			x									
73	0060126	*Streptococcus* (Group A) Culture			x									
73	0028903	*Streptococcus* (Group A) Rapid by NAAT	x			x								
73	2003037	Surveillance Culture			x									
78	0093199	T-Cell Clonality by Flow Cytometry Analysis of TCR V-Beta												x
73	3002633	*TFE3* Gene Rearrangement by FISH											x	
74	0060127	Tissue Culture and Gram Stain			x				x					
74	3002618	Tumor Necrosis Factor – alpha, Plasma											x	

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75	0051539	Tumor Necrosis Factor – alpha, Serum	x			x	x		x			x		
75	2011172	Urogenital Ureaplasma and Mycoplasma Species by PCR										x		
75	2005416	Urticaria-Induced Basophil Activation			x									
75	0065153	Vaginal Pathogen Panel by DNA Probe			x									
76	3002581	Vaginosis Panel by TMA											x	
76	0060363	Vancomycin-Resistant *Enterococcus* (VRE) Culture			x									
78	2007063	Viral Meningitis Panel by PCR, Cerebrospinal Fluid												x
78	2007062	Viral Meningoencephalitis Panel by PCR, Cerebrospinal Fluid												x
76	2007136	von Willebrand Factor Collagen Binding				x				x				
78	2013701	Vulvovaginal Candida Species by PCR												x
76	0040320	White Blood Cell Count				x								
77	0060132	Wound Culture and Gram Stain			x									

2011431 **ALK (D5F3) by Immunohistochemistry with Reflex to *ALK* Gene Rearrangements by FISH** **ALK REFLEX**

Performed: Mon-Fri
Reported: 1-5 days; add 3-5 days if reflexed

Specimen Required: Collect: Tumor tissue.
Specimen Preparation: Formalin fix (10 percent neutral buffered formalin) and paraffin embed specimen. Protect paraffin block and/or slides from excessive heat. Transport tissue block or 7 unstained (4-micron thick sections), positively charged slides in a tissue transport kit (ARUP supply #47808 recommended but not required) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787. (Min. 4 slides). If sending precut slides, do not oven bake.
Storage/Transport Temperature: Room temperature. Also acceptable: Refrigerated. Ship in cooled container during summer months.
Remarks: Include surgical pathology report.
Unacceptable Conditions: Paraffin block with no tumor tissue remaining; specimens fixed in any fixative other than 10 percent neutral buffered formalin. Decalcified specimens.
Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable.

2007324	**ALK (D5F3) with Interpretation by Immunohistochemistry**	**ALKD5F3 IP**

Specimen Required: Collect: Tumor tissue.
Specimen Preparation: Formalin fix (10 percent neutral buffered formalin) and paraffin embed specimen. Protect paraffin block and/or slides from excessive heat. Transport tissue block or 5 unstained (3- to 5-micron thick sections), positively charged slides in a tissue transport kit (ARUP supply #47808) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787. (Min. 3 slides). If sending precut slides, do not oven bake.
Storage/Transport Temperature: Room temperature. Also acceptable: Refrigerated. Ship in cooled container during summer months.
Remarks: This test code includes pathologist interpretation. Include surgical pathology report. IMMUNOHISTOCHEMISTRY ORDERING AND SUBMISSION DETAILS: Submit electronic request. If you do not have electronic ordering capability, use an ARUP Immunohistochemistry Stain Form (#32978) with an ARUP client number. For additional technical details, please contact ARUP Client Services at (800) 522-2787.
Unacceptable Conditions: Paraffin block with no tumor tissue remaining; specimens fixed in any fixative other than 10 percent neutral buffered formalin. Decalcified specimens.
Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

3001720	**Allergen, Region 10 Respiratory Panel IgE, Southwestern Grasslands (OK, TX)**	**REG10PANEL**

HOTLINE NOTE: Name change only.

3001721	**Allergen, Region 11 Respiratory Panel IgE, Rocky Mountain (AZ, ID, NM, WY, CO, MT, UT)**	**REG11PANEL**

HOTLINE NOTE: Name change only.

3001722	**Allergen, Region 12 Respiratory Panel IgE, Arid Southwest (S. AZ, S.E. CA)**	**REG12PANEL**

HOTLINE NOTE: Name change only.

3001723	**Allergen, Region 13 Respiratory Panel IgE, Southern Coastal (CA)**	**REG13PANEL**

HOTLINE NOTE: Name change only.

3001724	**Allergen, Region 14 Respiratory Panel IgE, Central California (CA)**	**REG14PANEL**

HOTLINE NOTE: Name change only.

3001725	**Allergen, Region 15 Respiratory Panel IgE, Intermountain West (NV, S. ID)**	**REG15PANEL**

HOTLINE NOTE: Name change only.

3001726	**Allergen, Region 16 Respiratory Panel IgE, Inland Northwest (OR, Central and East WA)**	**REG16PANEL**

HOTLINE NOTE: Name change only.

3001727	**Allergen, Region 17 Respiratory Panel IgE, Pacific Northwest (NW CA, W. OR, WA)**	**REG17PANEL**

HOTLINE NOTE: Name change only.

3001728	**Allergen, Region 18 Respiratory Panel IgE, Alaska**	**REG18PANEL**

HOTLINE NOTE: Name change only.

3001729	**Allergen, Region 19 Respiratory Panel IgE, Puerto Rico**	**REG19PANEL**

HOTLINE NOTE: Name change only.

3001712	**Allergen, Region 2 Respiratory Panel IgE, Mid-Atlantic (DE, MD, VA, DC, NC)**	**REG2PANEL**

HOTLINE NOTE: Name change only.

3001730	**Allergen, Region 20 Respiratory Panel IgE, Hawaii**	**REG20PANEL**

HOTLINE NOTE: Name change only.

3001713	**Allergen, Region 3 Respiratory Panel IgE, South Atlantic (GA, SC, N.FL)**	**REG3PANEL**

HOTLINE NOTE: Name change only.

3001714	**Allergen, Region 4 Respiratory Panel IgE, Subtropic Florida (S. of Orlando)**	**REG4PANEL**

HOTLINE NOTE: Name change only.

3001715	**Allergen, Region 5 Respiratory Panel IgE, Ohio Valley (IN, OH, TN, WV, KY)**	**REG5PANEL**

HOTLINE NOTE: Name change only.

3001716	**Allergen, Region 6 Respiratory Panel IgE, South Central (AL, AR, LA, MS)**	**REG6PANEL**

HOTLINE NOTE: Name change only.

3001717	**Allergen, Region 7 Respiratory Panel IgE, Northern Midwest (MI, WI, MN)**	**REG7PANEL**

HOTLINE NOTE: Name change only.

3001718	**Allergen, Region 8 Respiratory Panel IgE, Central Midwest (IL, MO, IA)**	**REG8PANEL**

HOTLINE NOTE: Name change only.

3001719	**Allergen, Region 9 Respiratory Panel IgE, Great Plains (KS, NE, ND, SD)**	**REG9PANEL**

HOTLINE NOTE: Name change only.

0050529 **Allergens, Pediatric Allergy, March (Progression) Profile IgE** **PED MARCH**

Specimen Required: Collect: Serum Separator Tube (SST). Also acceptable: Lavender (K_2EDTA), or Pink (K_2EDTA). Multiple specimen tubes should be avoided.
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1.3 mL serum or plasma to an ARUP Standard Transport Tube. (Min: 0.8 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Hemolyzed, icteric, or lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year

0098974 **Angiotensin Converting Enzyme, CSF** **ACE CSF**

Specimen Required: Collect: CSF.
Specimen Preparation: Separate from cells within 1 hour of collection.Transfer 1 mL CSF to an ARUP Standard Transport Tube. (Min: 0.5 mL)
Storage/Transport Temperature: Frozen.
Unacceptable Conditions: CSF containing gadolinium-based contrast agents. Hemolyzed or xanthochromic specimens.
Stability (collection to initiation of testing): Ambient: 4 hours; Refrigerated: 1 week; Frozen: 6 months

Note: Gadolinium contrast agents have been reported to inhibit ACE activity. Therefore, CSF containing gadolinium-based contrast agents should not be submitted to the laboratory for evaluation

New Test **3002477** **Anti-gp210 Antibody, IgG** **GP210 AB**
Click for Pricing

Methodology: Semi-Quantitative Enzyme-Linked Immunosorbent Assay
Performed: Wed
Reported: 1-8 days

Specimen Required: Collect: Serum Separator Tube (SST).
Storage/Transport Temperature: 1 mL serum at 2-8°C. (Min: 0.1 mL) Submit specimen in an ARUP Standard Transport Tube.
Remarks: Remove serum from cells ASAP
Unacceptable Conditions: Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 month

Reference Interval:

20.0 Units or less	Negative
20.1-24.9 Units	Equivocal
25.0 Units or greater	Positive

Interpretive Data: GP210 IgG antibodies can be detected in patients with primary biliary cholangitis (PBC) and may be of diagnostic relevance in a subset of patients with PBC who are negative for anti-mitochondrial antibodies (AMA). These antibodies have a relatively low sensitivity with excellent specificity for PBC. A negative result does not rule out PBC.

CPT Code(s): 83516

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0060201 **Antimicrobial Susceptibility - MIC, Individual** **MA MIC**

CPT Code(s): CPT codes vary based on method.

New Test **3002482** **Anti-sp100 and anti-gp210 Antibodies, IgG** **SP100GP210**

Click for Pricing

Additional Technical Information

Methodology: Semi-Quantitative Enzyme-Linked Immunosorbent Assay
Performed: Wed
Reported: 1-8 days

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Non-serum, heat-inactivated, contaminated, grossly icteric, severely lipemic, grossly hemolyzed specimens or inclusion of fibrin clot..
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

Reference Interval:

Test Number	Components	Reference Interval	
3002478	Anti-sp100 Antibodies, IgG	20.0 Units or less	Negative
		20.1-24.9 Units	Equivocal
		25.0 Units or greater	Positive
3002477	Anti-gp210 Antibodies, IgG	20.0 Units or less	Negative
		20.1-24.9 Units	Equivocal
		25.0 Units or greater	Positive

Interpretive Data:
Refer to report

CPT Code(s): 83516 x2

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

New Test **3002478** **Anti-sp100 Antibody, IgG** **SP100 AB**
Click for Pricing

Methodology: Semi-Quantitative Enzyme-Linked Immunosorbent Assay
Performed: Wed
Reported: 1-8 days

Specimen Required: Collect: Serum Separator Tube (SST).
Storage/Transport Temperature: 1 mL serum at 2-8°C. (Min: 0.1 mL) Submit specimen in an ARUP Standard Transport Tube.
Remarks: Remove serum from cells ASAP.
Unacceptable Conditions: Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year

Reference Interval:

20.0 Units or less	Negative
20.1-24.9 Units	Equivocal
25.0 Units or greater	Positive

Interpretive Data: SP100 IgG antibodies can be detected in patients with primary biliary cholangitis (PBC) and may be of diagnostic relevance in a subset of patients with PBC who are negative for anti-mitochondrial antibodies (AMA). These antibodies have a relatively low sensitivity with excellent specificity for PBC. A negative result does not rule out PBC.

CPT Code(s): 83516

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

2001594 **Arbovirus Antibodies, IgG and IgM, Serum** **ARBOSER GM**

Specimen Required: Collect: Serum separator tube. Also acceptable: Plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.5 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of acute specimens. **Mark specimens plainly as "acute" or "convalescent."**
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

2001593 **Arbovirus Antibodies, IgG, Serum** **ARBO SER G**

Specimen Required: Collect: Serum separator tube. Also acceptable: Plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of acute specimens. **Mark specimens plainly as "acute" or "convalescent."**
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, hemolyzed, or severely lipemic, specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

2001592 **Arbovirus Antibodies, IgM, Serum** **ARBO SER M**

Specimen Required: Collect: Serum separator tube. Also acceptable: Plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of acute specimens. **Mark specimens plainly as "acute" or "convalescent."**
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Plasma. Contaminated, heat-inactivated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

New Test **3002479** **Autoimmune Liver Disease Reflexive Panel** **LIVER PAN**

Click for Pricing

Additional Technical Information

Methodology: Semi-Quantitative Enzyme-Linked Immunosorbent Assay/Semi-Quantitative Indirect Fluorescent Antibody
Performed: Sun-Sat
Reported: 1-8 days

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Non-serum, heat-inactivated, contaminated, grossly icteric, severely lipemic, grossly hemolyzed specimens or inclusion of fibrin clot.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

Reference Interval:

Test Number	Components	Reference Interval			
0050065	Mitochondrial M2 Antibody, IgG (ELISA)	20.0 Units or less	Negative		
		20.1-24.9 Units	Equivocal		
		25.0 Units or greater	Positive		
0051174	F-Actin (Smooth Muscle) Antibody, IgG by ELISA with Reflex to Smooth Muscle Antibody, IgG Titer				
		Test Number	**Components**	**Reference Interval**	
			F-Actin (Smooth Muscle) Antibody, IgG	19 Units or less	Negative
				20-30 Units	Weak Positive - Suggest repeat testing in two to three weeks with fresh specimen
				31 Units or greater	Positive – Suggestive of autoimmune hepatitis or chronic active hepatitis
		0051244	Smooth Muscle Antibody, IgG Titer	Less than 1:20	
0055235	Soluble Liver Antigen Antibody, IgG	20.0 Units or less	Negative		
		20.1-24.9 Units	Equivocal		
		25.0 Units or greater	Positive		
0055241	Liver-Kidney Microsome - 1 Antibody, IgG	20.0 Units or less	Negative		
		20.1-24.9 Units	Equivocal		
		25.0 Units or greater	Positive		
3000082	Antinuclear Antibody (ANA) with HEp-2 Substrate, IgG by IFA	Less than 1:80			

Interpretive Data:
Refer to report.

Note: If F-Actin, IgG by ELISA is 20 Units or greater, then Smooth Muscle Antibody (SMA), IgG by IFA titer will be added. Additional charges apply.

ANA are determined by indirect fluorescence assay (IFA) using HEp-2 substrate and IgG-specific conjugate at a screening dilution of 1:80. If positive, patterns reported include homogeneous, speckled, centromere, nucleolar, nuclear dots, or cytoplasmic. All positive results are reported with endpoint titers, at no additional charge.

CPT Code(s): 86039, 86376, 83516 x3; if reflexed, add 86256

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

New Test **3002582** **Bacterial Vaginosis by TMA** **BV TMA**
Click for Pricing

Specimen Collection and Handling

Methodology: Qualitative Transcription-Mediated Amplification
Performed: Tue, Thu, Sat
Reported: 1-4 days

Specimen Required: Patient Prep: Patient must be 14 years of age or older.
Collect: Vaginal specimen collected with pink swab from Aptima MultiTest Swab Collection kit (ARUP supply #55224 PK/50 or #55229 PK/10) available online through eSupply using ARUP Connect or contact Client Services at (800) 522-2787.
Specimen Preparation: Place swab in MultiTest Swab Specimen Transport Tube, break shaft at scoreline then recap tube.
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Specimens in any transport media other than indicated above. Specimen in MultiTest swab transport media without a swab.
Stability (collection to initiation of testing): Ambient: 30 days; Refrigerated: 30 days; Frozen: 90 days

Reference Interval: Negative.

Interpretive Data:
A negative result does not preclude a possible infection.

A single qualitative result is determined based on relative amounts of the following target organisms: *Lactobacillus (L. gasseri, L. crispatus,* and *L. jensenii), Gardnerella vaginalis,* and *Atopobium vaginae*. This assay does not report individual organisms.

Results should be interpreted in conjunction with other clinical data. This test has not been validated for use with specimens collected by patients at home.

This test is intended for medical purposes only and is not valid for the evaluation of suspected sexual abuse or for other forensic purposes.

CPT Code(s): 87801

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0050106 ***Bartonella quintana* Antibodies, IgG & IgM by IFA** **BART PAN**

Specimen Required: Collect: Serum separator tube.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of the acute specimens. **Mark specimens plainly as "acute" or "convalescent."**
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0050094 ***Bartonella quintana* Antibody, IgG by IFA** **QUINT G**

Specimen Required: Collect: Serum separator tube.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of the acute specimens. **Mark specimens plainly as acute or convalescent.**
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0050093 ***Bartonella quintana* Antibody, IgM by IFA** **QUINT M**

Specimen Required: Collect: Serum separator tube.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of the acute specimens. **Mark specimens plainly as acute or convalescent.**
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

3001798 **Blastomyces Antigen Quantitative by EIA, Urine** **BLASTOAG U**

Specimen Required: Collect: Urine.
Specimen Preparation: Transfer 1 mL urine to an ARUP Standard Transport Tube. (Min: 0.5 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Specimens preserved in boric acid.
Stability (collection to initiation of testing): Ambient: Unacceptable; Refrigerated: 2 weeks; Frozen: Indefinitely

3000231 ***Blastomyces dermatitidis* Antibodies by EIA with Reflex to Immunodiffusion, CSF** **BLST R CSF**

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 1 mL CSF to an ARUP Standard Transport Tube. (Min: 0.3 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Other body fluids. Contaminated, hemolyzed, xanthochromic, or severely lipemic specimens.
Stability (collection to initiation of testing): Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

3000236 ***Blastomyces dermatitidis* Antibodies by EIA with Reflex to Immunodiffusion, Serum** **BLST R SER**

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of the acute specimens.
Storage/Transport Temperature: Refrigerated.
Remarks: **Mark specimens plainly as acute or convalescent.**
Unacceptable Conditions: Contaminated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0060108 Body Fluid Culture and Gram Stain — MC BF

Performed: Sun-Sat
Reported: Negative at 6 days
Positives as soon as detected

Note: Gram stain, identification, and susceptibility tests are billed separately from culture. Anaerobe culture is NOT included with this order. Anaerobe culture is recommended for body fluids, tissue, and deep wound/surgical cultures. If anaerobe culture is needed, please order Anaerobe Culture (ARUP test code 0060143) and use anaerobic collection device for transportation. Testing is limited to the university of Utah Health Science Center only.

For CSF, order Cerebrospinal Fluid (CSF) Culture and Gram Stain (ARUP test code 0060106). For blood, order Blood Culture (ARUP test code 0060102) or Blood Culture, AFB and Fungal (ARUP test code 0060024).

0060103 Bone Culture and Gram Stain — MC BONE

Performed: Sun-Sat
Reported: Negative at 8 days
Positives as soon as detected

Note: Identification and susceptibility tests are billed separately from culture. Testing is limited to the university of Utah Health Science Center only.

0051750 *BRAF* Codon 600 Mutation Detection with Reflex to *MLH1* Promoter Methylation — BRAF RFLX

HOTLINE NOTE: There is a component change associated with this test.
Add component 2002148, Block ID

0060700 Bronchoscopy Culture and Gram Stain — MC BAL

Performed: Sun-Sat
Reported: Negative at 3 days
Positives as soon as detected

Note: Gram stain, identification and susceptibility tests are billed separately from culture. Testing is limited to the university of Utah Health Science Center only.

0050135 *Brucella* Antibody (Total) by Agglutination — BRUC

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of the acute specimens.
Storage/Transport Temperature: Refrigerated.
Remarks: **Mark specimens plainly as "acute" or "convalescent."**
Unacceptable Conditions: Contaminated, heat-inactivated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 6 months (avoid repeated freeze/thaw cycles)

0060159 *Brucella* Culture — MC BRUC

Performed: Sun-Sat
Reported: Negative at 22 days
Positives as soon as detected

New Test **3002583** **Candida glabrata, Candida species, and Trichomonas vaginalis by TMA** **CVTV TMA**

Click for Pricing

Specimen Collection and Handling

Methodology: Qualitative Transcription-Mediated Amplification
Performed: Tue, Thu, Sat
Reported: 1-4 days

Specimen Required: Patient Prep: Patient must be 14 years of age or older.
Collect: Vaginal specimen collected with pink swab from Aptima MultiTest Swab Collection kit (ARUP supply #55224 PK/50 or #55229 PK/10) available online through eSupply using ARUP Connect or contact Client Services at (800) 522-2787.
Specimen Preparation: Place swab in MultiTest Swab Specimen Transport Tube, break shaft at scoreline then recap tube.
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Specimens in any transport media other than indicated above. Specimen in MultiTest swab transport media without a swab.
Stability (collection to initiation of testing): Ambient: 30 days; Refrigerated: 30 days; Frozen: 90 days

Reference Interval: Negative.

Interpretive Data:
A negative result does not preclude a possible infection.

This test detects *Trichomonas vaginalis*, *Candida glabrata*, and other *Candida* species (*C. albicans, C. parapsilosis, C. dubliniensis,* and *C. tropicalis).* The assay does not differentiate among organisms in the *Candida* species group.

Results should be interpreted in conjunction with other clinical data. This test has not been validated for use with specimens collected by patients at home.

This test is intended for medical purposes only and is not valid for the evaluation of suspected sexual abuse or for other forensic purposes.

CPT Code(s): 87481, 87661

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0060106 **Cerebrospinal Fluid (CSF) Culture and Gram Stain** **MC CSF**

Performed: Sun-Sat
Reported: Negative at 6 days
Positives as soon as detected

Note: Gram stain, identification, and susceptibility tests are billed separately from culture. Testing is limited to the university of Utah Health Science Center only.

2011164 ***Chlamydia trachomatis* and *Neisseria gonorrhoeae* (CTNG) by Transcription-Mediated Amplification (TMA) with Reflex to CT/NG Confirmation** **CTNG CONF**

Specimen Required: Patient Prep: **MultiTest Swab or ThinPrep Collection:** Patient must be 14 years of age or older.
Collect: Vaginal specimen collected with pink swab from Aptima MultiTest Swab Specimen Collection kit (ARUP supply #55224 PK/50 or #55229 PK/10) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787.
Also acceptable: Cervical or male urethral specimen collected with blue swab from Aptima Unisex Swab Specimen Collection kit (ARUP supply #28907 PK/50 or #54555 PK/10), first catch urine in sterile container or cervical brush in ThinPrep Pap test collection kit. Refer to "Sample Collection for the Diagnosis of STD" under Specimen Handling at www.aruplab.com for specific specimen collection and transport instructions.
Specimen Preparation: **Swab:** Place swab in Swab Specimen Transport Tube, break shaft off at scoreline then recap tube.
Urine: Transfer 2 mL urine within 24 hours to Aptima Urine Specimen Transport Tube (ARUP supply #28908 PK/50 or #54556 PK/10) available online through eSupply using ARUP Connect ™ or contact ARUP Client Services at (800) 522-2787. Liquid level must be between fill lines on tube.
ThinPrep: Vortex ThinPrep PreservCyt solution and transfer 1 mL to an Aptima Specimen Transfer Tube (ARUP supply #42711) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787. To reduce the potential for contamination, ThinPrep specimens should be poured off, using sterile technique, into the Aptima Specimen Transfer Tube prior to Cytology Testing.
Storage/Transport Temperature: Refrigerated
Remarks: **Specimen source is required.**
Unacceptable Conditions: Large white swab included in Aptima Unisex Swab Specimen Collection kit is for preparatory cleaning of the endocervix and is unacceptable for testing. Specimens in any transport media other than indicated above. Specimens in swab transport media without a swab.
Stability (collection to initiation of testing): **MultiTest or Unisex Swab:** Ambient: 2 months; Refrigerated: 2 months; Frozen: 1 year
Aptima Urine Specimen Transport Tube: Ambient: 1 month; Refrigerated: 1 month; Frozen: 3 months
Aptima Specimen Transfer Tube: Ambient: 2 weeks; Refrigerated: 1 month; Frozen: 1 year
ThinPrep: Ambient: 1 month; Refrigerated: 1 month; Frozen: Unacceptable

0060241 ***Chlamydia trachomatis* and *Neisseria gonorrhoeae* by Transcription-Mediated Amplification (TMA)** **CGAMD**

Specimen Required: Patient Prep: **MultiTest Swab:** Patient must be 14 years of age or older.
Collect: Vaginal, throat, or rectal specimen collected with pink swab from Aptima MultiTest Swab Specimen Collection kit (ARUP supply #55224 PK/50 or #55229 PK/10) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787.
Also acceptable: Cervical, eye or male urethral specimen collected with blue swab from Aptima Unisex Swab Specimen Collection kit (ARUP supply #28907 PK/50 or #54555 PK/10) or first catch urine in a sterile container. Refer to "Sample Collection for the Diagnosis of STD" under Specimen Handling at www.aruplab.com for specific specimen collection and transport instructions.
Specimen Preparation: **Swab:** Place swab in Swab Specimen Transport Tube, break shaft off at scoreline then recap tube.
Urine: Transfer 2 mL urine within 24 hours to an Aptima Urine Specimen Transport Tube (ARUP supply #28908 PK/50 or 54556 PK/10). Liquid level must be between fill lines on tube.
Storage/Transport Temperature: Refrigerated.
Remarks: **Specimen source is required.**
Unacceptable Conditions: Large white swab included in Aptima Unisex Swab Specimen Collection kit is for preparatory cleaning of the endocervix and is unacceptable for testing. Specimens in any transport media other than indicated above. Specimens in swab transport media without a swab.
Stability (collection to initiation of testing): **MultiTest Swab or Unisex Swab:** Ambient: 2 months; Refrigerated: 2 months; Frozen: 1 year
Aptima Urine Specimen Transport Tube: Ambient: 1 month; Refrigerated: 1 month; Frozen: 3 months

0060243 ***Chlamydia trachomatis* by Transcription-Mediated Amplification (TMA)** **CTAMD**

Specimen Required: Patient Prep: **MultiTest Swab or ThinPrep Collection:** Patient must be 14 years of age or older.
Collect: Vaginal, throat, or rectal specimen collected with pink swab from Aptima MultiTest Swab Specimen Collection kit (ARUP supply #55224 PK/50 or #55229 PK/10) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787.
Also acceptable: Cervical, eye, or male urethral specimen collected with blue swab from Aptima Unisex Swab Specimen Collection kit (ARUP supply #28907 PK/50 or #54555 PK/10), first catch urine in sterile container or cervical brush in ThinPrep Pap test collection kit. Refer to "Sample Collection for the Diagnosis of STD" under Specimen Handling at www.aruplab.com for specific specimen collection and transport instructions.
Specimen Preparation: **Swab:** Place swab in Swab Specimen Transport Tube, break shaft off at scoreline then recap tube.
Urine: Transfer 2 mL urine within 24 hours to Aptima Urine Specimen Transport Tube (ARUP supply #28908 PK/50 or #54556 PK/10). Liquid level must be between fill lines on tube.
ThinPrep: Vortex ThinPrep PreservCyt solution and transfer 1 mL to an Aptima Specimen Transfer Tube (ARUP supply #42711) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787. To reduce the potential for contamination, ThinPrep specimens should be poured off, using sterile technique, into the Aptima Specimen Transfer Tube prior to Cytology Testing.
Storage/Transport Temperature: Refrigerated.
Remarks: **Specimen source is required.**
Unacceptable Conditions: Large white swab included in Aptima Unisex Swab Specimen Collection kit is for preparatory cleaning of the endocervix and is unacceptable for testing. Specimens in any transport media other than indicated above. Specimens in swab transport media without a swab.
Stability (collection to initiation of testing): **MultiTest or Unisex Swab:** Ambient: 2 months; Refrigerated: 2 months; Frozen: 1 year
Aptima Urine Specimen Transport Tube: Ambient: 1 month; Refrigerated: 1 month; Frozen: 3 months
Aptima Specimen Transfer Tube: Ambient: 2 weeks; Refrigerated: 1 month; Frozen: 1 year
ThinPrep: Ambient: 1 month; Refrigerated: 1 month; Frozen: Unacceptable

New Test **3001858** **Chronic Lymphocytic Leukemia (CLL) Mutation Panel by Next Generation Sequencing** **CLL NGS**

Available Now
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Additional Technical Information

Out of Pocket Estimator

Methodology: Massively Parallel Sequencing
Performed: Varies
Reported: 12-14 days

Specimen Required: Collect: Lavender (K_2 or K_3 EDTA). Also acceptable: Bone Marrow (K_2 or K_3 EDTA) or Fresh-frozen tissue.
Specimen Preparation: **Whole Blood:** Do not freeze. Transport 3 mL whole blood. (Min: 1.5 mL)
Bone Marrow: Do not freeze. Transport 3 mL bone marrow. (Min: 1.5 mL)
Fresh-frozen Tissue: Transport 5 mg fresh-frozen tissue. (Min: 5 mg)
Separate specimens must be submitted when multiple tests are ordered.
Storage/Transport Temperature: **Whole Blood or Bone Marrow:** Refrigerated.
Fresh-frozen Tissue: Frozen.
Unacceptable Conditions: Serum, plasma.
Whole Blood or Bone Marrow: Specimens collected in anticoagulants other than EDTA. Clotted or grossly hemolyzed specimens.
Stability (collection to initiation of testing):
Whole Blood or Bone Marrow: Ambient: 24 hours; Refrigerated: 5 days; Frozen: Unacceptable
Fresh-frozen Tissue: Ambient: Unacceptable; Refrigerated: Unacceptable; Frozen: 1 month

Reference Interval: By report

Interpretive Data:
Refer to report.
See Compliance Statement B: www.aruplab.com/CS

Note: Genes tested: *ATM, BCL2, BIRC3*, BRAF, BTG1, BTK, CARD11, CD79B, CXCR4, DDX3X, FBXW7, IKZF3, KRAS, MAP2K1, MED12, MGA, MYD88, NOTCH1, NRAS, PLCG2, POT1, RPS15*, SAMHD1, SF3B1, TP53, XPO1, ZMYM3*

* - One or more exons are not covered by sequencing for the indicated gene; see Additional Technical Information test fact sheet.

CPT Code(s): 81450

New York DOH approval pending. Call for status update.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

New Test **3002508** **Clobazam and Metabolite, Quantitative, Serum or Plasma** **CLOBAZAM**
Click for Pricing

Methodology: Quantitative High Performance Liquid Chromatography/Tandem Mass Spectrometry
Performed: Mon, Wed, Sat
Reported: 1-4 days

Specimen Required: Collect: Plain Red, Lavender (K_2 or K_3EDTA) or Pink (K_2EDTA).
Specimen Preparation: Separate from cells ASAP or within two hours of collection. Transfer 2 mL serum or plasma to an ARUP Standard Transport Tube. (Min: 0.3 mL)
Storage/Transport Temperature: Refrigerated. Also acceptable: Room temperature or frozen.
Unacceptable Conditions: Gel separator tubes. Hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: 3 days; Refrigerated: 2 weeks; Frozen: 2 months (Avoid repeated freeze thaw cycles)

Reference Interval: By report

Available Separately	Components	Therapeutic and Toxic Range
No	Clobazam	Therapeutic Range: 30 – 300 ng/mL Toxic: Greater than 500 ng/mL
No	N-Desmethylclobazam	Therapeutic Range: 300 – 3000 ng/mL Toxic: Greater than 5000 ng/mL

Interpretive Data: Clobazam is a benzodiazepine drug indicated for adjunctive treatment for seizures associated with Lennox-Gastaut syndrome in patients 2 years and older. The therapeutic range is based on serum, pre-dose (trough) draw collection at steady-state concentration. The pharmacokinetics of clobazam are influenced by drug-drug interactions and by poor CYP2C19 metabolism. Adverse effects may include constipation, somnolence, sedation, and skin rash. The concomitant use of clobazam with other central nervous system (CNS) depressants may increase the risk of somnolence and sedation. See Compliance Statement B: www.aruplab.com/CS

CPT Code(s): 80339 (Alt code: G0480)

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0050137 ***Coccidioides* Antibodies, IgG and IgM by ELISA** **COCCI G/M**

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 2 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of the acute specimens.
Storage/Transport Temperature: Refrigerated.
Remarks: **Please mark specimens plainly as "acute" or "convalescent."**
Unacceptable Conditions: Contaminated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

3000057 ***Coccidioides* Antibodies, IgG and IgM by ELISA, CSF** **COCCIGMCSF**

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 2 mL CSF to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of the acute specimens.
Storage/Transport Temperature: Refrigerated.
Remarks: **Please Mark specimens plainly as "acute" or "convalescent."**
Unacceptable Conditions: Contaminated, hemolyzed, xanthochromic, or severely lipemic specimens.
Stability (collection to initiation of testing): Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0050170 *Coccidioides* Antibody by CF — COCCI

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of acute specimens.
Storage/Transport Temperature: Refrigerated.
Remarks: **Mark specimens plainly as "acute" or "convalescent."**
Unacceptable Conditions: Hemolyzed, icteric, or lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

3000055 *Coccidioides* Antibody IgG ELISA, CSF — COCCIG CSF

Specimen Required: Collect: CSF
Specimen Preparation: Transfer 1 mL CSF to an ARUP Standard Transport Tube. (Min: 0.3 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, hemolyzed, xanthochromic, or severely lipemic specimens.
Stability (collection to initiation of testing): Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

3000056 *Coccidioides* Antibody IgM ELISA, CSF — COCCIM CSF

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 1 mL CSF to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens must be received within 30 days from receipt of the acute specimens.
Storage/Transport Temperature: Refrigerated.
Remarks: **Mark specimens plainly as "acute" or "convalescent".**
Unacceptable Conditions: Contaminated, hemolyzed, xanthochromic, or severely lipemic specimens.
Stability (collection to initiation of testing): Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0050179 *Coccidioides* Antibody, IgG by ELISA — COCCI G

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0050178 *Coccidioides* Antibody, IgM by ELISA — COCCI M

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens must be received within 30 days from receipt of the acute specimens.
Storage/Transport Temperature: Refrigerated.
Remarks: **Mark specimens plainly as "acute" or "convalescent."**
Unacceptable Conditions: Contaminated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0050183 *Coccidioides immitis* Antibodies by Immunodiffusion — COCCI-PPT

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Transfer 0.5 mL serum to an ARUP Standard Transport Tube (Min: 0.3 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

New Test 3002575 Complement Activity Total, (CH50) — CH50 TOTAL

Click for Pricing

Additional Technical Information

Methodology: Quantitative Immunoturbidimetry.
Performed: Sun-Sat
Reported: 1-2 days

Specimen Required: Collect: Plain red.
Specimen Preparation: Allow specimen to clot for one hour at room temperature. Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.5 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered.**
Unacceptable Conditions: Separator tubes. Specimens left to clot at 2-8°C. Specimens exposed to repeated freeze/thaw cycles. Non-frozen specimens. Grossly hemolyzed or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: Unacceptable; Refrigerated: Unacceptable; Frozen: 1 month

Reference Interval:

Low	38.6 U/mL or less
Normal	38.7-89.9 U/mL
High	90.0 U/mL or greater

CPT Code(s): 86162

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0099073 Complement Component 7 — COMP 7

Performed: Varies
Reported: 4-18 days

Specimen Required: Collect: Plain Red. Also acceptable: Lavender (K_2 EDTA) or Plasma Preparation Tube (PPT).
Specimen Preparation: Transfer 1 mL serum or plasma to an ARUP Standard Transport Tube. (Min: 0.1 mL)
Storage/Transport Temperature: Room temperature. Also acceptable: Refrigerated or frozen
Stability (collection to initiation of testing): Ambient: 3 weeks; Refrigerated: 3 weeks; Frozen: 3 weeks

HOTLINE NOTE: Remove information found in the Unacceptable Conditions field.

New Test **3002463** **Connective Tissue Disease First Line Panel with Reflex** **CTD PAN**
Click for Pricing

Additional Technical Information

Methodology: Qualitative Enzyme-Linked Immunosorbent Assay/Semi-Quantitative Indirect Fluorescent Antibody (IFA)/Semi-Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-5 days

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.6 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Specimen types other than those listed. Specimens containing fibrin clots. Contaminated, grossly hemolyzed, heat-inactivated, or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

Reference Interval:

Test Number	Components	Reference Interval
0050215	Double-Stranded DNA (dsDNA) Antibody, IgG by ELISA	None Detected
2002693	Double-Stranded DNA (dsDNA) Antibody, IgG by IFA (using *Crithidia luciliae)*	Less than 1:10
0050470	Smith/RNP (ENA) Antibody, IgG	29 AU/mL or less: Negative 30-40 AU/mL: Equivocal 41 AU/mL or greater: Positive
0050085	Smith (ENA) Antibody, IgG	29 AU/mL or less: Negative 30-40 AU/mL: Equivocal 41 AU/mL or greater: Positive
2012074	SSA 52 and 60 (Ro) (ENA) Antibodies, IgG	**Test Number** / **Components** / **Reference Interval** SSA-52 (Ro52) (ENA) Antibody, IgG: 29 AU/mL or Less: Negative; 30-40 AU/mL: Equivocal; 41 AU/mL or greater: Positive SSA-60 (Ro60) (ENA) Antibody, IgG: 29 AU/mL or Less: Negative; 30-40 AU/mL: Equivocal; 41 AU/mL or greater: Positive
0050692	SSB (La) (ENA) Antibody, IgG	29 AU/mL or less: Negative 30-40 AU/mL: Equivocal 41 AU/mL or greater: Positive
0099592	Jo-1 Antibody, IgG	29 AU/mL or less: Negative 30-40 AU/mL: Equivocal 41 AU/mL or greater: Positive
0050599	Scleroderma (Scl-70) (ENA) Antibody, IgG	29 AU/mL or less: Negative 30-40 AU/mL: Equivocal 41 AU/mL or greater: Positive

Interpretive Data: Refer to report.

Note: If Double-Stranded DNA (dsDNA) Antibody, IgG by ELISA is detected, then Double-Stranded DNA (dsDNA) Antibody, IgG by IFA (using *Crithidia luciliae*) will be added. Additional charges apply.

CPT Code(s): 86235 x7 and 86225; if reflexed, add 86256
New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

2012634 ***Coxiella burnetii* (Q-Fever) Antibodies, IgG and IgM, Phase I and II with Reflex to Titer** **Q-F GM**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of the acute specimens. **Mark specimens plainly as "acute" and "convalescent."**
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

2012625 ***Coxiella burnetii* (Q-Fever) Antibody IgG, Phase I and II with Reflex to Titer** **QF G 1/2**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of the acute specimens. **Mark specimens plainly as "acute" and "convalescent."**
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0050181 **C-Reactive Protein, Neonatal** **CRPN**

Specimen Required: Collect: Plasma Separator Tube (PST) microtainer. Also acceptable: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. If serum is used, allow specimen to clot completely at room temperature. Transfer 0.2 mL plasma or serum to an ARUP Standard Transport Tube. (Min: 0.1 mL)
Storage/Transport Temperature: Refrigerated. Also acceptable: Frozen.
Unacceptable Conditions: EDTA plasma. Hemolyzed specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 15 days; Refrigerated: 2 months; Frozen: 3 years

2013664 **Cystic Fibrosis (*CFTR*) 165 Pathogenic Variants with Reflex to Sequencing and Reflex to Deletion/Duplication** **CFVAR COMP**

Specimen Required: Collect: Lavender (K_2EDTA), pink (K_2EDTA), or yellow (ACD Solution A or B).
Specimen Preparation: Transport 5 mL whole blood. (Min: 3 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Plasma or serum. Specimens collected in sodium heparin or lithium heparin tubes.
Stability (collection to initiation of testing): Ambient: 72 hours; Refrigerated: 2 weeks; Frozen: 1 month

3001524 Cytochrome P450 Genotyping Panel CYP PANEL

Performed: Varies
Reported: 5-10 days

Specimen Required: Patient Prep:
Collect: Lavender (K_2EDTA), Pink (K_2EDTA), or Yellow (ACD Solution A or B).
Specimen Preparation: Transport 3 mL whole blood. (Min: 1 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Plasma or serum. Specimens collected in sodium heparin or lithium heparin.
Stability (collection to initiation of testing): Ambient: 72 hours; Refrigerated: 1 week; Frozen: 1 month

Interpretive Data:

Background Information for Cytochrome P450 Genotyping Panel:
Characteristics: The cytochrome P450 (CYP) isozymes 2C19, 2C8, 2C9, 2D6 and the CYP3A subfamily are involved in the metabolism of many drugs. Variants in the genes that code for CYP2C19, CYP2C8, CYP2C9, CYP2D6, CYP3A4, and CYP3A5 will influence pharmacokinetics of respective substrates, and may predict or explain non-standard dose requirements, therapeutic failure, or adverse reactions.
Inheritance: Autosomal codominant.
Cause: Gene variants affect enzyme expression or activity.
Variants Tested: See the Additional Technical Information document.
Clinical Sensitivity: Drug-dependent.
Methodology: Polymerase chain reaction (PCR) and fluorescence monitoring.
Analytical Sensitivity and Specificity: Greater than 99 percent.
Limitations: Only the targeted variants will be detected by this panel, and assumptions about phase and content are made to assign alleles. Publically available sources such as the www.pharmvar.org or www.pharmgkb.org provide guidance on phenotype predictions and allele frequencies. A combination of the *CYP2D6**5 (gene deletion) and a *CYP2D6* gene duplication cannot be specifically identified; however, this combination is not expected to adversely affect the phenotype prediction. Diagnostic errors can occur due to rare sequence variations. Risk of therapeutic failure or adverse reactions with gene substrates may be affected by genetic and non-genetic factors that are not detected by this test. This result does not replace the need for therapeutic drug or clinical monitoring.

Please note the information contained in this report does not contain medication recommendations, and should not be interpreted as recommending any specific medications. Any dosage adjustments or other changes to medications should be evaluated in consultation with a medical provider.

See Compliance Statement C: www.aruplab.com/CS

HOTLINE NOTE: There is a component change associated with this test.
Add component 3002511, CYP PANEL, GeneDose Link
Remove component 3001528, EER Cytochrome P450 Genotyping Panel

New Test **3002601** **Cytokine Panel 13, Plasma** **CYT13 PLA**
Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Additional specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:

Test Number	Components	Reference Interval
3002631	Interleukin 2 Receptor, Soluble, Plasma	266.5 – 1410.4 pg/mL
3002624	Interleukin 12, Plasma	4.7 pg/mL or less
3002628	Interferon gamma, Plasma	10.4 pg/mL or less
3002622	Interleukin 4, Plasma	2.5 pg/mL or less
3002621	Interleukin 5, Plasma	2.1 pg/mL or less
3002623	Interleukin 10, Plasma	5.3 pg/mL or less
3002625	Interleukin 13, Plasma	5.3 pg/mL or less
3002629	Interleukin 1 beta, Plasma	7.4 pg/mL or less
3002620	Interleukin 6, Plasma	2.5 pg/mL or less
3002619	Interleukin 8, Plasma	9.4 pg/mL or less
3002618	Tumor Necrosis Factor – alpha, Plasma	14.5 pg/mL or less
3002630	Interleukin 2, Plasma	2.1 pg/mL or less
3002626	Interleukin 17, Plasma	2.2 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520 x13

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051394 Cytokine Panel 13, Serum CYT 12 SE

Specimen Required: Collect: Serum separator tube, or plain red.
Specimen Preparation: Separate serum cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Additional specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
Effective May 18, 2020

Test Number	Components	Reference Interval
0051529	Interleukin 2 Receptor, Soluble, Serum	Effective May 18, 2020 175.3 pg/mL to 858.2 pg/mL
0051530	Interleukin 12, Serum	Effective May 18, 2020 1.9 pg/mL or less
0051531	Interferon gamma, Serum	Effective May 18, 2020 4.2 pg/mL or less
0051532	Interleukin 4, Serum	Effective May 18, 2020 2.2 pg/mL or less
0051533	Interleukin 5, Serum	Effective May 18, 2020 2.1 pg/mL or less
0051534	Interleukin 10, Serum	Effective May 18, 2020 2.8 pg/mL or less
0051535	Interleukin 13, Serum	Effective May 18, 2020 2.3 pg/mL or less
0051536	Interleukin 1 beta, Serum	Effective May 18, 2020 6.7 pg/mL or less
0051537	Interleukin 6, Serum	Effective May 18, 2020 2.0 pg/mL or less
0051538	Interleukin 8, Serum	Effective May 18, 2020 3.0 pg/mL or less
0051539	Tumor Necrosis Factor – alpha, Serum	Effective May 18, 2020 7.2 pg/mL or less
0051588	Interleukin 2, Serum	Effective May 18, 2020 2.1 pg/mL or less
2013115	Interleukin 17, Serum	1.4 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051529, Interleukin 2 Receptor (CD25), Soluble from Interleukin 2 Receptor (CD25), Soluble to Interleukin 2 Receptor, Soluble, Serum.
Change the charting name for component 0051530, Interleukin 12 from Interleukin 12 to Interleukin 12, Serum.
Change the charting name for component 0051531, Interferon gamma from Interferon gamma to Interferon gamma, Serum.
Change the charting name for component 0051532, Interleukin 4 from Interleukin 4 to Interleukin 4, Serum.
Change the charting name for component 0051533, Interleukin 5 from Interleukin 5 to Interleukin 5, Serum.
Change the charting name for component 0051534, Interleukin 10 from Interleukin 10 to Interleukin 10, Serum.
Change the charting name for component 0051535, Interleukin 13 from Interleukin 13 to Interleukin 13, Serum.
Change the charting name for component 0051536, Interleukin 1 beta from Interleukin 1 beta to Interleukin 1 beta, Serum.
Change the charting name for component 0051537, Interleukin 6 from Interleukin 6 to Interleukin 6, Serum.
Change the charting name for component 0051538, Interleukin 8 from Interleukin 8 to Interleukin 8, Serum.
Change the charting name for component 0051539, Tumor Necrosis Factor – alpha from Tumor Necrosis Factor – alpha to Tumor Necrosis Factor – alpha, Serum.
Change the charting name for component 0051588, Interleukin 2 from Interleukin 2 to Interleukin 2, Serum.
Change the charting name for component 2013113, Interleukin 17 from Interleukin 17 to Interleukin 17, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051529, Interleukin 2 Receptor, Soluble, Serum from XXXXXX to XXXXXXX.X.
Change the numeric map for component 0051530, Interleukin 12, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051531, Interferon gamma, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051532, Interleukin 4, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051533, Interleukin 5, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051534, Interleukin 10, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051535, Interleukin 13, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051536, Interleukin 1 beta, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051537, Interleukin 6, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051538, Interleukin 8, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051539, Tumor Necrosis Factor – alpha, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051588, Interleukin 2, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 2013113, Interleukin 17, Serum from XXXXXXXX to XXXXXX.X.

New Test **3002616** **Cytokine Panel, Monokines, Plasma** **CYT MON P**
Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:

Test Number	Components	Reference Interval
3002629	Interleukin 1 beta, Plasma	7.4 pg/mL or less
3002620	Interleukin 6, Plasma	2.5 pg/mL or less
3002619	Interleukin 8, Plasma	9.4 pg/mL or less
3002618	Tumor Necrosis Factor – alpha, Plasma	14.5 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520 x4

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051524 Cytokine Panel, Monokines, Serum CYT MON SE

Specimen Required: Collect: Serum separator tube, or plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:

Test Number	Components	Reference Interval
0051536	Interleukin 1 beta, Serum	Effective May 18, 2020 6.7 pg/mL or less
0051537	Interleukin 6, Serum	Effective May 18, 2020 2.0 pg/mL or less
0051538	Interleukin 8, Serum	Effective May 18, 2020 3.0 pg/mL or less
0051539	Tumor Necrosis Factor – alpha, Serum	Effective May 18, 2020 7.2 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051536, Interleukin 1 beta from Interleukin 1 beta to Interleukin 1 beta, Serum.
Change the charting name for component 0051537, Interleukin 6 from Interleukin 6 to Interleukin 6, Serum.
Change the charting name for component 0051538, Interleukin 8 from Interleukin 8 to Interleukin 8, Serum.
Change the charting name for component 0051539, Tumor Necrosis Factor – alpha from Tumor Necrosis Factor – alpha to Tumor Necrosis Factor – alpha, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051536, Interleukin 1 beta, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051537, Interleukin 6, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051538, Interleukin 8, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051539, Tumor Necrosis Factor – alpha, Serum from XXXXXX to XXXXXX.X.

New Test **3002617** **Cytokine Panel, TH1, Plasma** **CYT TH1 P**
Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:

Test Number	Components	Reference Interval
3002630	Interleukin 2, Plasma	2.1 pg/mL or less
3002631	Interleukin 2 Receptor, Soluble, Plasma	266.5 pg/mL to 1410.4 pg/mL
3002624	Interleukin 12, Plasma	4.7 pg/mL or less
3002628	Interferon gamma, Plasma	10.4 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520 x4

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051408 Cytokine Panel, TH1, Serum CYT TH1 SE

Specimen Required: Collect: Serum separator tube, or plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:

Test Number	Components	Reference Interval
0051588	Interleukin 2, Serum	Effective May 18, 2020 2.1 pg/mL or less
0051529	Interleukin 2 Receptor, Soluble, Serum	Effective May 18, 2020 175.3 pg/mL - 858.2 pg/mL
0051530	Interleukin 12, Serum	Effective May 18, 2020 1.9 pg/mL or less
0051531	Interferon gamma, Serum	Effective May 18, 2020 4.2 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051588, Interleukin 2 from Interleukin 2 to Interleukin 2, Serum.
Change the charting name for component 0051529, Interleukin 2 Receptor (CD25), Soluble from Interleukin 2 Receptor (CD25), Soluble to Interleukin 2 Receptor, Soluble, Serum.
Change the charting name for component 0051530, Interleukin 12 from Interleukin 12 to Interleukin 12, Serum.
Change the charting name for component 0051531, Interferon gamma from Interferon gamma to Interferon gamma, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051529, Interleukin 2 Receptor, Soluble, Serum from XXXXXX to XXXXXXX.X.
Change the numeric map for component 0051530, Interleukin 12, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051531, Interferon gamma, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051588, Interleukin 2, Serum from XXXXXX to XXXXXX.X.

New Test **3002627** **Cytokine Panel, TH2, Plasma** **CYT TH2 P**
Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:

Test Number	Components	Reference Interval
3002622	Interleukin 4, Plasma	2.5 pg/mL or less
3002621	Interleukin 5, Plasma	2.1 pg/mL or less
3002623	Interleukin 10, Plasma	5.3 pg/mL or less
3002625	Interleukin 13, Plasma	5.3 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520 x4

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051518 Cytokine Panel, TH2, Serum — CYT TH2 SE

Specimen Required: Collect: Serum separator tube, or plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:

Test Number	Components	Reference Interval
0051532	Interleukin 4, Serum	Effective May 18, 2020 2.2 pg/mL or less
0051533	Interleukin 5, Serum	Effective May 18, 2020 2.1 pg/mL or less
0051534	Interleukin 10, Serum	Effective May 18, 2020 2.8 pg/mL or less
0051535	Interleukin 13, Serum	Effective May 18, 2020 2.3 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051532, Interleukin 4 from Interleukin 4 to Interleukin 4, Serum.
Change the charting name for component 0051533, Interleukin 5 from Interleukin 5 to Interleukin 5, Serum.
Change the charting name for component 0051534, Interleukin 10 from Interleukin 10 to Interleukin 10, Serum.
Change the charting name for component 0051535, Interleukin 13 from Interleukin 13 to Interleukin 13, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051532, Interleukin 4, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051533, Interleukin 5, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051534, Interleukin 10, Serum from XXXXXX to XXXXXX.X.
Change the numeric map for component 0051535, Interleukin 13, Serum from XXXXXX to XXXXXX.X.

2000133 Cytology, SurePath Liquid-Based Pap Test and Human Papillomavirus (HPV), High Risk with 16 and 18 Genotype by PCR, SurePath. (for routine co-testing in women over 30) — GH REQUEST

Note: In addition to the SurePath Pap Test, Human Papillomavirus (HPV), High Risk with 16 and 18 Genotype by PCR, SurePath (ARUP test code 2011933) will be performed and reported under a separate accession. The Pap Test is a screening test for cervical cancer and its precursors with an inherent false-negative rate.

HOTLINE NOTE: There is a reflexive pattern change associated with this test.
Remove reflex to 2011942, Human Papillomavirus (HPV), High Risk by PCR, SurePath
Add reflex to 2011933, Human Papillomavirus (HPV), High Risk with 16 and 18 Genotype by PCR, SurePath

2000135 Cytology, SurePath Liquid-Based Pap Test with Reflex to Human Papillomavirus (HPV), High Risk with 16 and 18 Genotype by PCR, SurePath — GR REQUEST

Note: If the SurePath Pap Test is interpreted as atypical squamous cells of undetermined significance (ASC-US), then Human Papillomavirus (HPV), High Risk with 16 and 18 Genotype by PCR, SurePath (ARUP test code 2011933) will be added. Additional charges apply.

HOTLINE NOTE: There is a reflexive pattern change associated with this test.
Remove reflex to 2011942, Human Papillomavirus (HPV), High Risk by PCR, SurePath
Add reflex to 2011933, Human Papillomavirus (HPV), High Risk with 16 and 18 Genotype by PCR, SurePath

2000136 **Cytology, ThinPrep Pap Test and Human Papillomavirus (HPV), High Risk by Transcription-Mediated Amplification (TMA) with Reflex to HPV Genotypes 16 and 18/45 by TMA, ThinPrep (for routine co-testing in women over 30)** **TH REQUEST**

Note: In addition to the ThinPrep Pap Test, Human Papillomavirus (HPV), High Risk by Transcription-Mediated Amplification (TMA) with Reflex to HPV Genotypes 16 and 18/45 by TMA, ThinPrep (ARUP test code 2007890) will be performed and reported under a separate accession. Additional charges apply. The Pap Test is a screening test for cervical cancer and its precursors with an inherent false-negative rate.

CPT Code(s): 88142; if reviewed by pathologist add 88141; 87624; if reflexed, add 87625

HOTLINE NOTE: There is a reflexive pattern change associated with this test.
Remove reflex to 2007893, Human Papillomavirus (HPV), High Risk by Transcription-Mediated Amplification (TMA), ThinPrep
Add reflex to 2007890, Human Papillomavirus (HPV), High Risk by Transcription-Mediated Amplification (TMA) with Reflex to HPV Genotypes 16 and 18/45 by TMA, ThinPrep

2000138 **Cytology, ThinPrep Pap Test with Reflex to Human Papillomavirus (HPV), High Risk by Transcription-Mediated Amplification (TMA) with Reflex to HPV Genotypes 16 and 18/45 by TMA, ThinPrep** **TR REQUEST**

Note: In addition to the ThinPrep Pap Test, Human Papillomavirus (HPV), High Risk by Transcription-Mediated Amplification (TMA) with Reflex to HPV Genotypes 16 and 18/45 by TMA, ThinPrep (ARUP test code 2007890) will be performed and reported under a separate accession. Additional charges apply. The Pap Test is a screening test for cervical cancer and its precursors with an inherent false-negative rate.

CPT Code(s): 88142; if reviewed by pathologist add 88141. If reflexed, add 87624; if further reflexed, add 87625

HOTLINE NOTE: There is a reflexive pattern change associated with this test.
Remove reflex to 2007893, Human Papillomavirus (HPV), High Risk by Transcription-Mediated Amplification (TMA), ThinPrep
Add reflex to 2007890, Human Papillomavirus (HPV), High Risk by Transcription-Mediated Amplification (TMA) with Reflex to HPV Genotypes 16 and 18/45 by TMA, ThinPrep

New Test **3002537** **Digitoxin Quantitative, Serum or Plasma** **DIGIT SP**
Click for Pricing

Methodology: Quantitative Immunoassay
Performed: Varies
Reported: 5-8 days

Specimen Required: Collect: Plain Red or Lavender (K_2EDTA or K_3EDTA).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL serum or plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL). **Test is not performed at ARUP; separate specimens must be submitted when multiple tests are ordered.**
Storage/Transport Temperature: Refrigerated. Also acceptable: Frozen.
Unacceptable Conditions: Separator tubes.
Stability (collection to initiation of testing): Ambient: Undetermined; Refrigerated: 1 week; Frozen: 3 months

Reference Interval: By report

CPT Code(s): 80375 (Alt code: G0480)

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0060361 Ear Culture and Gram Stain — MC EAR

Performed: Sun-Sat
Reported: Negative at 3 days
Positives as soon as detected

Note: Identification and susceptibility tests are billed separately from culture. Testing is limited to the university of Utah Health Science Center only.

0051002 *Ehrlichia chaffeensis* Antibodies, IgG & IgM by IFA — E CHAF ABS

Specimen Required: Collect: Serum Separator Tube.
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of the acute specimens. **Mark specimens plainly as acute or convalescent.**
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0051004 *Ehrlichia chaffeensis* Antibody, IgG by IFA — E CH G

Specimen Required: Collect: Serum Separator Tube.
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of the acute specimens. **Mark specimens plainly as acute or convalescent.**
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0051003 *Ehrlichia chaffeensis* Antibody, IgM by IFA — E CH M

Specimen Required: Collect: Serum Separator Tube.
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of the acute specimens. **Mark specimens plainly as acute or convalescent.**
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, hemolyzed, or severely lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

2007332 ERBB2 (HER2) (HercepTest)™ by Immunohistochemistry — HERCEP IHC

Specimen Required: Collect: Tissue or cells.
Specimen Preparation: Formalin fix (10 percent neutral buffered formalin) and paraffin embed specimen (cells must be prepared into a cellblock). Protect paraffin block and/or slides from excessive heat. Transport tissue block or 5 unstained (3- to 5- micron thick sections), positively charged slides in a tissue transport kit (ARUP supply #47808) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800)522-2787. (Min: 2 slides) If sending precut slides, do not oven bake.
Storage/Transport Temperature: Room temperature. Also acceptable: Refrigerated. Ship in cooled container during summer months.
Remarks: **IMMUNOHISTOCHEMISTRY ORDERING AND SUBMISSION DETAILS:** Submit electronic request. If you do not have electronic ordering capability, use an ARUP Immunohistochemistry Stain Form (#32978) with an ARUP client number. For additional technical details, please contact ARUP Client Services at (800)522-2787.
Unacceptable Conditions: Specimens submitted with non-representative tissue type. Depleted specimens. Decalcified specimens.
Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

0049178 ***ERBB2* (*HER2/neu*) (HercepTest) by Immunohistochemistry, Tissue with Reflex to FISH if 2+** **HERCEP2IP**

Performed: Mon-Fri
Reported: 1-5 days, add 3-7 days if reflexed

Specimen Required: Collect: Tumor tissue
Specimen Preparation: Formalin fix (10 percent neutral buffered formalin) and paraffin embed tissue within 30 minutes of removal from patient. Fixative duration: 6-72 hours. Transport tissue block or 10 unstained (3-to 5-micron thick sections), positively charged slides in a tissue transport kit (ARUP supply #47808) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800)522-2787. (Min: 6 slides) If sending precut slides, do not oven bake.
Storage/Transport Temperature: Room temperature or refrigerated. Ship in cooled container during summer months.
Remarks: Pathology report including tissue source and tumor origin must be submitted. Document time from tissue acquisition to fixation and fixation duration on requisition or enter at time of order. **IMMUNOHISTOCHEMISTRY ORDERING AND SUBMISSION DETAILS:** Submit electronic request. If you do not have electronic ordering capability, use an ARUP Immunohistochemistry form (#32978) with an ARUP client number. For additional technical details, please contact ARUP Client Services at (800) 522-2787.
Unacceptable Conditions: Paraffin block with no tumor tissue remaining. Specimens with fixation delayed for more than 30 minutes. Specimens fixed in any other fixative other than 10 percent neutral buffered formalin. Tissue fixed for less than 6 hours or greater than 72 hours. Cytology specimens fixed in alcohol. Decalcified specimens.
Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

0049174 ***ERBB2* (*HER2/neu*) (HercepTest) with Interpretation by Immunohistochemistry, Tissue** **HERCEPIP**

Specimen Required: Collect: Tumor Tissue
Specimen Preparation: Formalin fix (10 percent neutral buffered formalin) and paraffin embed tissue within 30 minutes of removal from patient. Fixative duration: 6-72 hours. Transport tissue block or 5 unstained (3-to 5-micron thick sections), positively charged slides in a tissue transport kit (ARUP supply #47808) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800)522-2787. (Min: 3 slides) If sending precut slides, do not oven bake.
Storage/Transport Temperature: Room temperature or refrigerated. Ship in cooled container during summer months.
Remarks: Pathology report including tissue source and tumor origin must be submitted. Document time from tissue acquisition to fixation and fixation duration on requisition or enter at time of order. **IMMUNOHISTOCHEMISTRY ORDERING AND SUBMISSION DETAILS:** Submit electronic request. If you do not have electronic ordering capability, use an ARUP Immunohistochemistry form (#32978) with an ARUP client number. For additional technical details, please contact ARUP Client Services at (800) 522-2787.
Unacceptable Conditions: Paraffin block with no tumor tissue remaining. Specimens with fixation delayed for more than 30 minutes. Specimens fixed in any other fixative other than 10 percent neutral buffered formalin. Tissue fixed for less than 6 hours or greater than 72 hours. Cytology specimens fixed in alcohol. Decalcified specimens.
Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely ; Frozen: Unacceptable

2004516 **Estrogen Receptor (ER) by Immunohistochemistry** **ER IHC**

Specimen Required: Collect: Tissue or cells.
Specimen Preparation: Formalin fix (10 percent neutral buffered formalin) and paraffin embed specimen (cells must be prepared into a cellblock). Protect paraffin block and/or slides from excessive heat. Transport tissue block or 5 unstained (3- to 5-micron thick sections), positively charged slides in a tissue transport kit (ARUP supply #47808). Available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787. (Min: 2 slides). If sending precut slides, do not oven bake.
Storage/Transport Temperature: Room temperature or refrigerated. Ship in cooled container during summer months.
Remarks: **IMMUNOHISTOCHEMISTRY ORDERING AND SUBMISSION DETAILS**: Submit electronic request. If you do not have electronic ordering capability, use an ARUP Immunohistochemistry Stain Form (#32978) with an ARUP client number. For additional technical details, contact ARUP Client Services at (800) 522-2787.
Unacceptable Conditions: Specimens submitted with non-representative tissue type. Depleted specimens. Decalcified specimens.
Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

Interpretive Data:

See Compliance Statement A: www.aruplab.com/CS

0049210 Estrogen/Progesterone Receptor with Interpretation by Immunohistochemistry — ERPR IP

Specimen Required: Collect: Tumor tissue.
Specimen Preparation: Formalin fix (10 percent neutral buffered formalin) and paraffin embed tissue no later than 1 hour after removal from patient. Fixative duration: 6-72 hours. If sending precut slides, do not oven bake. Transport tissue block or 5 unstained (3-5 micron thick sections), positively charged slides in a tissue transport kit (ARUP supply #47808) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800)522-2787.(Min: 4 slides).If sending precut slides, do not oven bake.
Storage/Transport Temperature: Room temperature or refrigerated. Ship in cooled container during summer months.
Remarks: Document time from tissue acquisition to fixation and fixation duration on submitting requisition or enter at time of order. Include surgical pathology report.
Unacceptable Conditions: Paraffin block with no tumor tissue remaining. Specimens with fixation delayed for more than one hour. Specimens fixed in any fixative other than 10 percent neutral buffered formalin. Biopsies fixed for less than 6 hours and greater than 72 hours. Cytology specimens fixed in alcohol. Decalcified specimens.
Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

0060142 Eye Culture and Gram Stain — MC EYE

Performed: Sun-Sat
Reported: Negative at 8 days
Positives as soon as detected

Note: Identification and susceptibility tests are billed separately from culture. Testing is limited to the university of Utah Health Science Center only.

2008476 Fluoroquinolone-Resistant Organism, Culture — MC FRO

Performed: Sun-Sat
Reported: Negative at 4 days
Positives as soon as detected

New Test Available Now
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3001981 **Comprehensive Heart Biopsy Workup** **HRT REQ**

Time Sensitive

Methodology: Microscopy/Histochemistry/Immunofluorescence/Electron Microscopy
Performed: Sun-Sat
Reported: 1-5 days

Specimen Required: Collect: Two transplant heart biopsies OR three native heart biopsies.. Obtain Renal/Heart Biopsy Collection Kit prior to collection procedure (ARUP supply #40460) available online through eSupply using ARUP Connect™ or contact Client Services at (800) 522-2787.
Specimen Preparation: Special fixatives are required; collection instructions are provided with the kit. One biopsy placed in 10 percent formalin, one placed in Zeus fixative, and one placed in glutaraldehyde.
Storage/Transport Temperature: Room temperature. Also acceptable: Refrigerated. Ship in cooled container during summer months.
Remarks: Submit electronic request. If you do not have electronic ordering capability, use an ARUP Anatomic Pathology Form (#32960) with an ARUP client number. For additional technical details, contact ARUP Client Services at (800) 522-2787. Submit clinical history.
Unacceptable Conditions: Specimens submitted with non-representative tissue type.
Stability (collection to initiation of testing): Ambient: 24 hours; Refrigerated: 24 hours; Frozen: Unacceptable

Interpretive Data: Refer to report.

Note: Detailed collection instructions are available in the Renal/Heart Biopsy Collection Kit (#40460) or can be requested by contacting ARUP Client Services at (800) 522-2787. Use of a different collection kit could result in suboptimal biopsy fixation and delays in diagnosis. All vials must be labeled with the patient's full name and unique identifier. Avoid drying of specimens; make sure the specimens are completely submerged into the fixative and not caught on vial sides or in the threads of the cap.
Testing is ordered at the discretion of the ARUP pathologist; charges vary by individual patient.

CPT Code(s): CPT codes vary by individual patient

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

New Test **3002061** **HLA Class I and II Panel (A,B,C,*DRB1, DQA1, DQB1, DPB1*) by Next Generation Sequencing** **HLA 7LOCI**

Click for Pricing

Methodology: Polymerase Chain Reaction (PCR)/Massively Parallel Sequencing
Performed: Varies
Reported: 8-15 days

Specimen Required: Collect: Lavender (K_2 EDTA). Also acceptable: Yellow (ACD Solution A).
Specimen Preparation: Transfer 4 mL whole blood to an ARUP Standard Transport Tube. (Min: 1 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Specimens collected in Yellow (ACD Solution B). Clotted, grossly hemolyzed, or heparinized specimens.
Stability (collection to initiation of testing): Ambient: 72 hours; Refrigerated: 1 week; Frozen: Unacceptable

Reference Interval: By report

Interpretive Data:
Purpose: To identify HLA-A, -B, -C, -*DRB1*, -*DQA1*, -*DQB1* and -*DPB1* allelic polymorphisms on specimens for transplant candidates and their donors.
Methodology: PCR followed by next generation sequencing of HLA-A, -B, -C, -*DRB1*, -*DQA1*, -*DQB1*, and -*DPB1* loci.
Analytical Sensitivity & Specificity: >99 percent.
Limitations: Rare diagnostic errors can occur due to primer site mutations.
Test Results: Results are reported as HLA locus (A, B, C, *DRB1*, *DQA1*, *DQB1*, *DPB1*)* followed by the two-field (four digit) assigned allele.

Disclaimer Information:
HLA typing is performed by one or more of the following methodologies: next generation sequencing (NGS) and/or sequence specific probe hybridization (SSOP). The NMDP code provides possible rare alleles that cannot be ruled out. Additional unknown DNA polymorphisms could exist outside of the regions analyzed, the significance of which is not known.

This test was developed and its performance characteristics determined by the Histocompatibility& Immunogenetics laboratory at the University of Utah Health, and has not been cleared or approved by the U.S. Food and Drug Administration (FDA). The FDA has determined that such clearance or approval is not necessary. This test is used for clinical purposes; it should not be regarded as investigational or for research. The University of Utah Histocompatibility& Immunogenetics laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA-88) as qualified to perform high complexity clinical laboratory testing. Performed at: Histocompatibility& Immunogenetics laboratory, University of Utah Health, 417 Wakara Way, Suite 3220, Salt Lake City, UT 84108.

CPT Code(s): 81378; 81382 x3

New York DOH approval pending. Call for status update.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

New Test **3002062** **HLA Class I and II Panel (A,B,C,*DRB1, DRB345, DQA1, DQB1, DPA1, DPB1*) by Next Generation Sequencing** **HLA 11LOCI**

Click for Pricing

Methodology: Polymerase Chain Reaction (PCR)/Massively Parallel Sequencing
Performed: Varies
Reported: 8-15 days

Specimen Required: Collect: Lavender (K_2 EDTA). Also acceptable: Yellow (ACD Solution A).
Specimen Preparation: Transfer 4 mL whole blood to an ARUP Standard Transport Tube. (Min: 1 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Specimens collected in Yellow (ACD Solution B). Clotted, grossly hemolyzed, or heparinized specimens.
Stability (collection to initiation of testing): Ambient: 72 hours; Refrigerated: 1 week; Frozen: Unacceptable

Reference Interval: By report

Interpretive Data:
Purpose: To identify HLA-A, -B, -C, -*DRB1*, -*DRB345*, -*DQA1*, -*DQB1*, -*DPA1*, and -*DPB1* allelic polymorphisms on specimens for transplant candidates and their donors.
Methodology: PCR followed by next generation sequencing of HLA-A, -B, -C, -*DRB1*, -*DRB345*, -*DQA1*, -*DQB1*, -*DPA1* and -*DPB1* loci.
Analytical Sensitivity & Specificity: >99 percent.
Limitations: Rare diagnostic errors can occur due to primer site mutations.
Test Results: Results are reported as HLA locus (A, B, C, *DRB1*, *DRB345*, *DQA1*, *DQB1*, *DPA1*, *DPB1*)* followed by the two-field (four digit) assigned allele.

Disclaimer Information:
HLA typing is performed by one or more of the following methodologies: next generation sequencing (NGS) and/or sequence specific probe hybridization (SSOP). The NMDP code provides possible rare alleles that cannot be ruled out. Additional unknown DNA polymorphisms could exist outside of the regions analyzed, the significance of which is not known.

This test was developed and its performance characteristics determined by the Histocompatibility& Immunogenetics laboratory at the University of Utah Health, and has not been cleared or approved by the U.S. Food and Drug Administration (FDA). The FDA has determined that such clearance or approval is not necessary. This test is used for clinical purposes; it should not be regarded as investigational or for research. The University of Utah Histocompatibility& Immunogenetics laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA-88) as qualified to perform high complexity clinical laboratory testing. Performed at: Histocompatibility& Immunogenetics laboratory, University of Utah Health, 417 Wakara Way, Suite 3220, Salt Lake City, UT 84108.

CPT Code(s): 81382

New York DOH approval pending. Call for status update.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

New Test **3002307** **HLA Class I Panel (ABC) by Next Generation Sequencing** **HLACLASSI**
Click for Pricing

Methodology: Polymerase Chain Reaction (PCR)/Massively Parallel Sequencing
Performed: Varies
Reported: 8-15 days

Specimen Required: Collect: Lavender (K_2 EDTA). Also acceptable: Yellow (ACD Solution A).
Specimen Preparation: Transfer 4 mL whole blood to an ARUP Standard Transport Tube. (Min: 1 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Specimens collected in Yellow (ACD Solution B). Clotted, grossly hemolyzed, or heparinized specimens.
Stability (collection to initiation of testing): Ambient: 72 hours; Refrigerated: 1 week; Frozen: Unacceptable

Reference Interval: By report

Interpretive Data:
Purpose: To identify HLA-A, -B, and -C allelic polymorphisms on specimens for transplant candidates and their donors.
Methodology: PCR followed by next generation sequencing of HLA-A, -B and -C loci.
Analytical Sensitivity & Specificity: >99 percent.
Limitations: Rare diagnostic errors can occur due to primer site mutations.
Test Results: Results are reported as HLA locus (A, B, or C)* followed by the two-field (four digit) assigned allele.

Disclaimer Information:
HLA typing is performed by one or more of the following methodologies: next generation sequencing (NGS) and/or sequence specific probe hybridization (SSOP). The NMDP code provides possible rare alleles that cannot be ruled out. Additional unknown DNA polymorphisms could exist outside of the regions analyzed, the significance of which is not known.

This test was developed and its performance characteristics determined by the Histocompatibility& Immunogenetics laboratory at the University of Utah Health, and has not been cleared or approved by the U.S. Food and Drug Administration (FDA). The FDA has determined that such clearance or approval is not necessary. This test is used for clinical purposes; it should not be regarded as investigational or for research. The University of Utah Histocompatibility& Immunogenetics laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA-88) as qualified to perform high complexity clinical laboratory testing. Performed at: Histocompatibility& Immunogenetics laboratory, University of Utah Health, 417 Wakara Way, Suite 3220, Salt Lake City, UT 84108.

CPT Code(s): 81379

New York DOH approval pending. Call for status update.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

New Test **3002308** **HLA Class II Panel (*DRB1, DQA1* and *DQB1*) by Next Generation Sequencing** **HLACLASSII**

Click for Pricing

Methodology: Polymerase Chain Reaction (PCR)/Massively Parallel Sequencing
Performed: Varies
Reported: 8-15 days

Specimen Required: Collect: Lavender (K_2 EDTA). Also acceptable: Yellow (ACD Solution A).
Specimen Preparation: Transfer 4 mL whole blood to an ARUP Standard Transport Tube. (Min: 1 mL).
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Specimens collected in Yellow (ACD Solution B). Clotted, grossly hemolyzed, or heparinized specimens.
Stability (collection to initiation of testing): Ambient: 72 hours; Refrigerated: 1 week; Frozen: Unacceptable

Reference Interval: By report

Interpretive Data:
Purpose: To identify *HLA-DRB1, DQA1* and *DQB1* allelic polymorphisms on specimens for transplant candidates and their donors.
Methodology: PCR followed by next generation sequencing of *HLA-DRB1, DQA1* and *DQB1* loci.
Analytical Sensitivity & Specificity: >99 percent.
Limitations: Rare diagnostic errors can occur due to primer site mutations.
Test Results: Results are reported as *HLA* locus (*DRB1, DQA1 or DQB1*)* followed by the two-field (four digit) assigned allele.

Disclaimer Information:
HLA typing is performed by one or more of the following methodologies: next generation sequencing (NGS) and/or sequence specific probe hybridization (SSOP). The NMDP code provides possible rare alleles that cannot be ruled out. Additional unknown DNA polymorphisms could exist outside of the regions analyzed, the significance of which is not known.

This test was developed and its performance characteristics determined by the Histocompatibility& Immunogenetics laboratory at the University of Utah Health, and has not been cleared or approved by the U.S. Food and Drug Administration (FDA). The FDA has determined that such clearance or approval is not necessary. This test is used for clinical purposes; it should not be regarded as investigational or for research. The University of Utah Histocompatibility& Immunogenetics laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA-88) as qualified to perform high complexity clinical laboratory testing. Performed at: Histocompatibility& Immunogenetics laboratory, University of Utah Health, 417 Wakara Way, Suite 3220, Salt Lake City, UT 84108.

CPT Code(s): 81382 x3

New York DOH approval pending. Call for status update.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

New Test **3002503** **Human Immunodeficiency Virus Type 1 (HIV-1) GenoSure Archive** **HIV GSARCH**

Available Now
Click for Pricing

Methodology: Polymerase Chain Reaction (PCR)/Sequencing
Performed: Varies
Reported: 10-17 days

Specimen Required: Collect: Lavender (K_2 or K_3 EDTA).
Specimen Preparation: Freeze immediately. Transport 4 mL whole blood in the original collection tube. (Min: 1 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered.**
Unacceptable Conditions: Thawed specimens.
Stability (collection to initiation of testing): Ambient: Unacceptable; Refrigerated: Unacceptable; Frozen: 2 weeks

Reference Interval: By Report

Note: Procedure should be used for patients with documented HIV-1 infection and undetectable viral load or low level viremia.

CPT Code(s): 87900; 87901; 87906

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

New Test **3001242** **Human Immunodeficiency Virus Type 1 (HIV-1) GenoSure MG** **HIV GSMG**

Click for Pricing

Methodology: Polymerase Chain Reaction/Sequencing
Performed: Varies
Reported: 9-18 days

Specimen Required: Collect: Lavender (EDTA) or plasma preparation tube (PPT).
Specimen Preparation: Separate from cells within 6 hours of collection. Transfer 5 mL plasma to ARUP Standard Transport Tubes and freeze immediately. (Min: 3 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered.**
Unacceptable Conditions: Thawed specimens.
Stability (collection to initiation of testing): Ambient: Unacceptable; Refrigerated: Unacceptable; Frozen: 2 weeks

Reference Interval: By report

Note: Procedure should be used for patients with documented HIV-1 infection and viral loads greater than 500 copies/mL

CPT Code(s): 87900; 87901

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

New Test **3000882** **Human Immunodeficiency Virus Type 1 (HIV-1) PhenoSense** **HIV PHENO**

Click for Pricing

Methodology: Polymerase chain reaction (PCR) amplification and viral culture
Performed: Varies
Reported: 19-26 days

Specimen Required: Collect: Lavender (K_2 EDTA) or Plasma Preparation Tube (PPT).
Specimen Preparation: Separate from cells within 6 hours of collection. Transfer 3 mL plasma to an ARUP Standard Transport Tube and freeze immediately. (Min: 3 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered.**
Unacceptable Conditions: Thawed specimens.
Stability (collection to initiation of testing): Ambient: 6 hours; Refrigerated: 24 hours; Frozen: 2 weeks

Reference Interval: By report

CPT Code(s): 87903; 87904 x11

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

New Test **3001186** **Human Immunodeficiency Virus Type 1 (HIV-1) PhenoSense GT Plus Integrase** **HIVPS PLUS**

Click for Pricing

Methodology: Phenotyping/Genotyping
Performed: Varies
Reported: 17-21 days

Specimen Required: Collect: Lavender (EDTA) or Plasma Preparation Tube (PPT).
Specimen Preparation: Separate from cells within 6 hours of collection. Transfer 5 mL plasma to ARUP Standard Transport Tubes and freeze immediately. (Min: 3 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered.**
Unacceptable Conditions: Thawed specimens.
Stability (collection to initiation of testing): Ambient: Unacceptable; Refrigerated: Unacceptable; Frozen: 2 weeks

Reference Interval: By report

Note: Procedure should be used for patients with documented HIV-1 infection and viral loads greater than 500 copies/mL.

CPT Code(s): 87900; 87901; 87903; 87904 x14; 87906

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

3002008 **Human Papillomavirus (HPV) High Risk by in situ Hybridization, Paraffin** **HPVHR ISH**

Specimen Required: Collect: Tissue.
Specimen Preparation: Formalin fix (10 percent neutral buffered formalin) and paraffin-embed tissue. Transport tissue block or 5 unstained 5-micron slides in a tissue transport kit (recommended but not required) (ARUP supply #47808). Available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787. (Min: 4 slides) Protect paraffin block and/or slides from excessive heat.
Storage/Transport Temperature: Room temperature or refrigerated. Ship in cooled container during summer months.
Remarks: Include surgical pathology report.
Unacceptable Conditions: Specimens fixed or processed in alternative fixatives (alcohol, Prefer) or heavy metal fixatives (B-4 or B-5). Frozen specimens. Decalcified specimens.
Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

3002009 **Human Papillomavirus (HPV) Low Risk by in situ Hybridization, Paraffin** **HPVLR ISH**

Specimen Required: Collect: Tissue.
Specimen Preparation: Formalin fix (10 percent neutral buffered formalin) and paraffin embed tissue. Transport tissue block or 5 unstained positively charged, 5-micron slides in a tissue transport kit (recommended but not required) (ARUP supply #47808) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787. (Min: 4 slides) Protect paraffin block and/or slides from excessive heat.
Storage/Transport Temperature: Room temperature. Also acceptable: Refrigerated. Ship in cooled container during summer months.
Remarks: Include surgical pathology report.
Unacceptable Conditions: Specimens fixed or processed in alternative fixatives (alcohol, Prefer) or heavy metal fixatives (B-4 or B-5). Frozen specimens. Decalcified specimens.
Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

2011933 **Human Papillomavirus (HPV), High Risk with 16 and 18 Genotype by PCR, SurePath** **SP HPV1618**

HOTLINE NOTE: There is a price change associated with this test. Please contact ARUP Client Services at (800) 522-2787 for additional information.

2011940 **Human Papillomavirus (HPV), High Risk with 16 and 18 Genotype by PCR, ThinPrep** **TP HPV1618**

HOTLINE NOTE: There is a price change associated with this test. Please contact ARUP Client Services at (800) 522-2787 for additional information.

3000202 **5-Hydroxyindoleacetic acid (5-HIAA), Plasma** **5 HIAA PLA**

Performed: Varies
Reported: 14-21 days

0050049 **Immunofixation Electrophoresis, Immunoglobulin D and Immunoglobulin E, Serum** **IFE D/E**

Performed: Sun-Sat
Reported: 1-5 days

Specimen Required: Collect: Serum separator tube.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.5 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Plasma.
Stability (collection to initiation of testing): After separation from cells: Ambient: Unacceptable; Refrigerated: 1 week; Frozen: 1 month

2012572 Immunofixation Electrophoresis, Serum — IFE Q GEL

Performed: Sun-Sat
Reported: 1-5 days

Specimen Required: Collect: Serum separator tube.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.5 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Plasma.
Stability (collection to initiation of testing): After separation from cells: Ambient: Unacceptable; Refrigerated: 1 week; Frozen: 1 month

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0050272, Immunofix Electrophoresis Gel from Immunofix Electrophoresis Gel to Immunofix Electrophoresis Serum.
Change the charting name for component 2012601, EER Immunofix Electrophoresis Gel from EER Immunofix Electrophoresis Gel to EER Immunofix Electrophoresis Serum.

New Test 3002628 Interferon gamma, Plasma — IFNG PLA

Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
10.4 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051531 **Interferon gamma, Serum** **IFNG DO**

Specimen Required: Collect: Serum separator tube, or plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
Effective May 18, 2020
4.2 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051531, Interferon gamma from Interferon gamma to Interferon gamma, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051531, Interferon gamma, Serum from XXXXXX to XXXXXX.X.

New Test **3002629** **Interleukin 1 beta, Plasma** **IL1B PLA**
Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
7.4 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051536 **Interleukin 1 beta, Serum** **IL1B DO**

Specimen Required: Collect: Serum separator tube (SST), or plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
Effective May 18, 2020
6.7 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051536, Interleukin 1 beta from Interleukin 1 beta to Interleukin 1 beta, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051536, Interleukin 1 beta, Serum from XXXXXX to XXXXXX.X.

New Test **3002623** **Interleukin 10, Plasma** **IL10 PLA**
Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
5.3 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051534 **Interleukin 10, Serum** **IL10 DO**

Specimen Required: Collect: Serum separator tube, or plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
Effective May 18, 2020
2.8 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051534, Interleukin 10 from Interleukin 10 to Interleukin 10, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051534, Interleukin 10, Serum from XXXXXX to XXXXXX.X.

New Test **3002624** **Interleukin 12, Plasma** **IL12 PLA**
Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
4.7 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051530 Interleukin 12, Serum IL12 DO

Specimen Required: Collect: Serum separator tube, or plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
Effective May 18, 2020
1.9 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051530, Interleukin 12 from Interleukin 12 to Interleukin 12, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051530, Interleukin 12, Serum from XXXXXX to XXXXXX.X.

New Test 3002625 Interleukin 13, Plasma IL13 PLA

Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
5.3 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051535 **Interleukin 13, Serum** **IL13 DO**

Specimen Required: Collect: Serum separator tube, or plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
Effective May 18, 2020
2.3 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051535, Interleukin 13 from Interleukin 13 to Interleukin 13, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051535, Interleukin 13, Serum from XXXXXX to XXXXXX.X.

New Test **3002626** **Interleukin 17, Plasma** **IL17 PLA**
Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (Lithium Heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship sample in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
2.2 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

2013115 **Interleukin 17, Serum** **IL17**

Specimen Required: Collect: Serum Separator Tube (SST), or Plain Red.
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
Effective May 18, 2020
1.4 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 2013113, Interleukin 17 from Interleukin 17 to Interleukin 17, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 2013113, Interleukin 17, Serum from XXXXXXXX to XXXXXX.X.

New Test **3002631** **Interleukin 2 Receptor, Soluble, Plasma** **IL2R PLA**
Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
266.5 pg/mL - 1410.4 pg/mL

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051529 **Interleukin 2 Receptor, Soluble, Serum** **IL2R DO**

Specimen Required: Collect: Serum separator tube, or plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
Effective May 18, 2020
175.3 pg/mL - 858.2 pg/mL

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051529, Interleukin 2 Receptor (CD25), Soluble from Interleukin 2 Receptor (CD25), Soluble to Interleukin 2 Receptor, Soluble, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051529, Interleukin 2 Receptor, Soluble, Serum from XXXXXX to XXXXXXX.X.

New Test **3002630** **Interleukin 2, Plasma** **IL2 PLA**
Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
2.1 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051588 **Interleukin 2, Serum** **IL2 DO**

Specimen Required: Collect: Serum separator tube, or plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
Effective May 18, 2020
2.1 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051588, Interleukin 2 from Interleukin 2 to Interleukin 2, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051588, Interleukin 2, Serum from XXXXXX to XXXXXX.X.

New Test **3002622** **Interleukin 4, Plasma** **IL4 PLA**
Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
2.5 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051532 **Interleukin 4, Serum** **IL4 DO**

Specimen Required: Collect: Serum separator tube, or plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
Effective May 18, 2020
2.2 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051532, Interleukin 4 from Interleukin 4 to Interleukin 4, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051532, Interleukin 4, Serum from XXXXXX to XXXXXX.X.

New Test **3002621** **Interleukin 5, Plasma** **IL5 PLA**
Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship sample in ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
2.1 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051533 **Interleukin 5, Serum** **IL5 DO**

Specimen Required: Collect: Serum separator tube, or plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
Effective May 18, 2020
2.1 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051533, Interleukin 5 from Interleukin 5 to Interleukin 5, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051533, Interleukin 5, Serum from XXXXXX to XXXXXX.X.

New Test **3002620** **Interleukin 6, Plasma** **IL6 PLA**
Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
2.5 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051537 **Interleukin 6, Serum** **IL6 DO**

Specimen Required: Collect: Serum separator tube, or plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
Effective May 18, 2020
2.0 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051537, Interleukin 6 from Interleukin 6 to Interleukin 6, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051537, Interleukin 6, Serum from XXXXXX to XXXXXX.X.

New Test **3002619** **Interleukin 8, Plasma** **IL8 PLA**
Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
9.4 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051538 Interleukin 8, Serum IL8 DO

Specimen Required: Collect: Serum separator tube, or plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
Effective May 18, 2020
3.0 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051538, Interleukin 8 from Interleukin 8 to Interleukin 8, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051538, Interleukin 8, Serum from XXXXXX to XXXXXX.X.

3001866 Krebs von den Lungen-6 KL 6

Performed: Thu
Reported: 1-8 days

3001780 Leukemia/Lymphoma Phenotyping Evaluation by Flow Cytometry LL PANEL

Note: Flow cytometric leukemia and lymphoma analysis may aid in identifying the tumor lineage for diagnostic and prognostic purposes. After review of the clinical history and morphology, a panel of markers is selected for each case by a board-certified hematopathologist. In most cases, the lineage can be identified as T-cell, B-cell, or myeloid and a diagnosis or differential diagnosis can be made.

Available Markers*:
T-cell: CD1, CD2, CD3, CD4, CD5, CD7, CD8, TCR alpha-beta, TCR gamma-delta, Cytoplasmic CD3
B-cell: CD10, CD19, CD20, CD22, CD23, CD103, surface Kappa, surface Lambda, FMC7, Cytoplasmic Kappa, Cytoplasmic Lambda
Myelo/Mono: CD11b, CD13, CD14 (Mo2), CD14 (MY4), CD15, CD33, CD64, CD117, myeloperoxidase
Misc: CD11c, CD16, CD25, CD30, CD34, CD38, CD41, CD42b, CD45, CD56, CD57, CD61, HLA-DR, glycophorin, TdT, bcl-2, CD123, CD138, CD200, CD26, CD45, CRLF-2.

***Not all markers will be reported in all cases.** Requests for specific markers to be run must be listed on manual requisition or by footnote for electronic orders. We do not offer individual marker identification separately outside of the markers in this panel.

The report will include a pathologist interpretation and a marker interpretation range corresponding to CPT codes of 2-8 markers, 9-15 markers, and 16+ markers interpreted. Charges apply per marker.

3001321 Lymphocyte Proliferation, Mitogen Induced, by Flow Cytometry (48-Hr Critical Room Temp) LPM FLOW

HOTLINE NOTE: Name change only.

New Test Available Now Click for Pricing **3002539** **Lymphoid Enhancing Factor 1 by Immunohistochemistry** **LEF1 IHC**

Methodology: Immunohistochemistry
Performed: Mon-Fri
Reported: 1-3 days

Specimen Required: Collect: Tissue.
Specimen Preparation: Formalin fix (10 percent neutral buffered formalin) and paraffin embed specimen (cells must be prepared into a cellblock). Protect paraffin block and/or slides from excessive heat. Transport tissue block or 5 unstained (3- to 5-micron thick sections), positively charged slides in a tissue transport kit (recommended but not required), (ARUP supply #47808) available online through eSupply using ARUP Connect or contact ARUP Client Services at (800) 522-2787. (Min: 2 slides) If sending precut slides, do not oven bake.
Storage/Transport Temperature: Room temperature. Also acceptable: Refrigerated. Ship in cooled container during summer months.
Unacceptable Conditions: Specimens submitted with non-representative tissue type. Depleted specimens.
Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

Interpretive Data:

See Compliance Statement B: www.aruplab.com/CS

Note: This test is performed as a stain and return (technical) service only.

CPT Code(s): 88342

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0049302 **Mismatch Repair by Immunohistochemistry** **MSI**

Specimen Required: Collect: Tumor tissue.
Specimen Preparation: Formalin fix (10 percent neutral buffered formalin is preferred) and paraffin embed specimen. If sending precut slides, do not oven bake. Transport tissue block or 10 unstained (3-5 micron thick sections), positively charged slides in a tissue transport kit (ARUP supply #47808) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787.(Min: 5 slides). Protect paraffin block and/or slides from excessive heat.
Storage/Transport Temperature: Room temperature or refrigerated. Ship in cooled container during summer months.
Remarks: Only tissue that is clearly carcinoma (established by histological criteria) should be tested. Include surgical pathology report. Submit electronic request. If you do not have electronic ordering capability, use an ARUP requisition form complete with an ARUP client number. For additional technical details, please contact ARUP Client Services at (800) 522-2787.
Unacceptable Conditions: Frozen specimens. Specimens fixed or processed in alternative fixatives (alcohol, Prefer) or heavy metal fixatives (B-4 or B-5). Depleted or no tumor in tissue. Specimens submitted with non-representative tissue type. Decalcified specimens.
Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

2002715 **Monoclonal Protein Study, Expanded Panel, Serum** **IFE FLC**

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 2 mL serum to an ARUP Standard Transport Tube. (Min: 1 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Plasma. Room temperature specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: Unacceptable; Refrigerated: 1 week; Frozen: 1 month

New Test **3002568** **Monoclonal Protein Study, Serum** **IFE SPEP**
Click for Pricing

Methodology: Qualitative Immunofixation Electrophoresis/Quantitative Capillary Electrophoresis/Quantitative Spectrophotometry
Performed: Sun-Sat
Reported: 1-5 days

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1.5 mL serum to an ARUP Standard Transport Tube. (Min: 1 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Plasma.
Stability (collection to initiation of testing): After separation from cells: Ambient: Unacceptable; Refrigerated: 1 week; Frozen: 1 month

Reference Interval:

Test Number	Components	Reference Interval		
0050640	Protein Electrophoresis, Serum	Effective August 19, 2019		
		Test Number	**Components**	**Reference Interval**
			Total Protein, Serum	Refer to report
			Albumin	Refer to report
			Alpha-1 Globulins	Refer to report
			Alpha-2 Globulins	Refer to report
			Beta Globulins	Refer to report
			Gamma	Refer to report

Note: A copy of the graph will follow the final report.

CPT Code(s): 84155; 84165; 86334

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

New Test **3002063** **Multiple Myeloma Panel by FISH** **FISHMMP**

Click for Pricing

Time Sensitive

Oncology Test Request Form Recommended (ARUP form #43099)

Additional Technical Information

Methodology: Fluorescence in situ Hybridization
Performed: Sun-Sat
Reported: 5-14 days

Specimen Required: Collect: Non-diluted bone marrow collected in a heparinized syringe. Also acceptable: Green (sodium heparin).
Specimen Preparation: Transfer 3 mL bone marrow to a green (sodium heparin) (Min: 1 mL). **OR** transport 5 mL whole blood (Min: 2 mL).
Storage/Transport Temperature: Room temperature.
Unacceptable Conditions: Frozen specimens. Paraffin-embedded specimens. Clotted specimens.
Stability (collection to initiation of testing): Ambient: 48 hours; Refrigerated: 48 hours; Frozen: Unacceptable

Reference Interval: By report

Interpretive Data:

See Compliance Statement A: www.aruplab.com/CS

Note: Fluorescence in situ hybridization (FISH) panel is performed on CD138+ sorted cells (assuming specimen is sufficient for sorting) for multiple myeloma prognosis-specific genomic abnormalities: 1q (*CKS1B*) gain/amplification/17p (*TP53*) loss/deletion, t(4;14) (*IGH*/*FGFR3* and *MMSET* fusion)/+9/9q (*ASS1*) trisomy/gain, t(11;14) (*IGH/CCND1* fusion and/or +11), t(14;16) (*IGH*/*MAF* fusion), t(14;20) (*IGH*/*MAFB* fusion).

When this test is ordered in conjunction with a chromosome analysis, specimen prioritization will be given to FISH for the sorting of CD138+ cells. This could impact the successful completion of the chromosome analysis.

If sorting fails to yield sufficient CD138+ cells, testing will be performed using unsorted cells, if available.

A processing fee will be charged if this procedure is canceled at the client's request, after the test has been set up, or if the specimen integrity is inadequate to allow a complete analysis.

This test must be ordered using Oncology test request form #43099 or through your ARUP interface.
Contact ARUP Genetics Processing for other specimen types or information and specific collection and transportation instructions.

CPT Code(s): 88271 x7; 88275 x7; 88291

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0060244 *Neisseria gonorrhoeae* by Transcription-Mediated Amplification (TMA) GCAMD

Specimen Required: Patient Prep: **MultiTest Swab or ThinPrep Collection:** Patient must be 14 years of age or older.
Collect: Vaginal, throat, or rectal specimen collected with pink swab from Aptima MultiTest Swab Specimen Collection kit (ARUP supply #55224 PK/50 or #55229 PK/10) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787.
Also acceptable: Cervical, eye, or male urethral specimen collected with blue swab from Aptima Unisex Swab Specimen Collection kit (ARUP supply #28907 PK/50 or #54555 PK/10), first catch urine in sterile container or cervical brush in ThinPrep Pap test collection kit. Refer to "Sample Collection for the Diagnosis of STD" under Specimen Handling at www.aruplab.com for specific specimen collection and transport instructions.
Specimen Preparation: **Swab:** Place swab in Swab Specimen Transport Tube, break shaft off at scoreline then recap tube.
Urine: Transfer 2 mL urine within 24 hours to Aptima Urine Specimen Transport Tube (ARUP supply #28908 PK/50 or #54556 PK/10). Liquid level must be between fill lines on tube.
ThinPrep: Vortex ThinPrep PreservCyt solution and transfer 1 mL to an Aptima Specimen Transfer Tube (ARUP supply #42711) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787. To reduce the potential for contamination, ThinPrep specimens should be poured off, using sterile technique, into the Aptima Specimen Transfer Tube prior to Cytology Testing.
Storage/Transport Temperature: Refrigerated.
Remarks: **Specimen source is required.**
Unacceptable Conditions: Large white swab included in Aptima Unisex Swab Specimen Collection kit is for preparatory cleaning of the endocervix and is unacceptable for testing. Specimens in any transport media other than indicated above. Specimens in swab transport media without a swab.
Stability (collection to initiation of testing): **MultiTest or Unisex Swab:** Ambient: 2 months; Refrigerated: 2 months; Frozen: 1 year
Aptima Urine Specimen Transport Tube: Ambient: 1 month; Refrigerated: 1 month; Frozen: 3 months
Aptima Specimen Transfer Tube: Ambient: 2 weeks; Refrigerated: 1 month; Frozen: 1 year
ThinPrep: Ambient: 1 month; Refrigerated: 1 month; Frozen: Unacceptable

0065122 Parvovirus B 19 Antibody, IgM PARVO M

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of the acute specimens.
Storage/Transport Temperature: Refrigerated.
Remarks: **Mark specimens plainly as "acute" or "convalescent."**
Unacceptable Conditions: Contaminated, heat-inactivated, hemolyzed, lipemic, or icteric specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

Reference Interval:
Effective May 18, 2020

Component	Reference Interval
Parvovirus B 19 Antibody, IgM	0.90 IV or less: Negative - No significant level of detectable Parvovirus B19 IgM antibody. 0.91-1.09 IV: Equivocal - Repeat testing in 7-21 days may be helpful. 1.10 IV or greater: Positive - IgM antibody to Parvovirus B19 detected, which may indicate a current or recent infection. However, low levels of IgM antibodies may occasionally persist for more than 12 months post-infection.

0065120 Parvovirus B19 Antibodies, IgG and IgM PARVO

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of the acute specimens.
Storage/Transport Temperature: Refrigerated.
Remarks: **Mark specimens plainly as "acute" or "convalescent."**
Unacceptable Conditions: Contaminated, heat-inactivated, hemolyzed, lipemic, or icteric specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

Reference Interval:
Effective May 18, 2020

Test Number	Components	Reference Interval
0065121	Parvovirus B19 Antibody, IgG	0.90 IV or less: Negative - No significant level of detectable Parvovirus B19 IgG antibody. 0.91-1.09 IV: Equivocal - Repeat testing in 7-21 days may be helpful. 1.10 IV or greater: Positive - IgG antibody to Parvovirus B19 detected, which may indicate a current or past infection.
0065122	Parvovirus B 19 Antibody, IgM	0.90 IV or less: Negative - No significant level of detectable Parvovirus B19 IgM antibody. 0.91-1.09 IV: Equivocal - Repeat testing in 7-21 days may be helpful. 1.10 IV or greater: Positive - IgM antibody to Parvovirus B19 detected, which may indicate a current or recent infection. However, low levels of IgM antibodies may occasionally persist for more than 12 months post-infection.

0065121 Parvovirus B19 Antibody, IgG PARVO G

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL) Parallel testing is preferred and convalescent specimens **must** be received within 30 days from receipt of the acute specimens.
Storage/Transport Temperature: Refrigerated.
Remarks: **Mark specimens plainly as "acute" or "convalescent."**
Unacceptable Conditions: Contaminated, heat-inactivated, hemolyzed, lipemic, or icteric specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

Reference Interval:
Effective May 18, 2020

Component	Reference Interval
Parvovirus B19 Antibody, IgG	0.90 IV or less: Negative - No significant level of detectable Parvovirus B19 IgG antibody. 0.91-1.09 IV: Equivocal - Repeat testing in 7-21 days may be helpful. 1.10 IV or greater: Positive - IgG antibody to Parvovirus B19 detected, which may indicate a current or past infection.

New Test **3002598** **Phosphatidylethanol (PEth), Whole Blood, Quantitative** **PETH**

Click for Pricing

Additional Technical Information

Methodology: Quantitative Liquid Chromatography/Tandem Mass Spectrometry
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Lavender (K_2 or K_3 EDTA), Pink (K_2EDTA), Green (Lithium Heparin), Gray (Potassium Oxalate).
Specimen Preparation: Transport 1 mL whole blood. (Min: 0.5 mL)
Storage/Transport Temperature: Refrigerated. Also acceptable: Frozen.
Unacceptable Conditions: Gel separator tubes, Plain Red, light blue (citrate), or yellow (SPS or ACD solution).
Stability (collection to initiation of testing): Ambient: Unacceptable; Refrigerated: 2 weeks; Frozen: 1 month (-20°C)

Reference Interval: Less than 10 ng/mL

Interpretive Data:

Phosphatidylethanol (PEth) homologues	Result Interpretation	
PEth 16:0/18.1 (POPEth)	Less than 10 ng/mL	Not detected
	Less than 20 ng/mL	Abstinence or light alcohol consumption
	20 – 200 ng/mL	Moderate alcohol consumption
	Greater than 200 ng/mL	Heavy alcohol consumption or chronic alcohol use
PEth 16:0/18.2 (PLPEth)	Reference ranges are not well established (Reference: W. Ulwelling and K Smith 2018 J. Forensic Sci)	

Phosphatidylethanol (PEth) is a group of phospholipids formed in the presence of ethanol, phospholipase D and phosphatidylcholine. PEth is known to be a direct alcohol biomarker. The predominant PEth homologues are PEth 16:0/18:1 (POPEth) and PEth 16:0/18:2 (PLPEth), which account for 37-46% and 26-28% of the total PEth homologues, respectively. PEth is incorporated into the phospholipid membrane of red blood cells and has a general half-life of 4 – 10 days and a window of detection of 2 – 4 weeks. However, the window of detection is longer in individuals who chronically or excessively consume alcohol. The limit of quantification is 10 ng/mL. Serial monitoring of PEth may be helpful in monitoring alcohol abstinence over time. PEth results should be interpreted in the context of the patient's clinical and behavioral history. Patients with advanced liver disease may have falsely elevated PEth concentrations (Nguyen VL et al 2018, Alcoholism Clinical & Experimental Research).
See Compliance Statement B: www.aruplab.com/CS

CPT Code(s): 80321 (Alt code: G0480)

New York DOH approval pending. Call for status update.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

New Test **3002480** **Primary Biliary Cholangitis Panel** **BILIARY CH**
Click for Pricing

Additional Technical Information

Methodology: Semi-Quantitative Enzyme-Linked Immunosorbent Assay/Semi-Quantitative Indirect Fluorescent Antibody
Performed: Sun-Sat
Reported: 1-8 days

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.3 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Non-serum, heat-inactivated, contaminated, grossly icteric, severely lipemic, grossly hemolyzed specimens or inclusion of fibrin clot..
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 month

Reference Interval:

Test Number	Components	Reference Interval	
0050065	Mitochondrial M2 Antibody, IgG (ELISA)	20.0 Units or less	Negative
		20.1-24.9 Units	Equivocal
		25.0 Units or greater	Positive
3000082	Antinuclear Antibody (ANA) with HEp-2 Substrate, IgG by IFA	Less than 1:80	
3002478	Anti-sp100 Antibodies, IgG	20.0 Units or less	Negative
		20.1-24.9 Units	Equivocal
		25.0 Units or greater	Positive
3002477	Anti-gp210 Antibodies, IgG	20.0 Units or less	Negative
		20.1-24.9 Units	Equivocal
		25.0 Units or greater	Positive

Interpretive Data:
Refer to report.

Note: ANA are determined by indirect fluorescence assay (IFA) using HEp-2 substrate and IgG-specific conjugate at a screening dilution of 1:80. If positive, patterns reported include homogeneous, speckled, centromere, nucleolar, nuclear dots, or cytoplasmic. All positive results are reported with endpoint titers, at no additional charge.

CPT Code(s): 83516 x3, 86039

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

2004525 Progesterone Receptor (PR) by Immunohistochemistry — PR IHC

Specimen Required: Collect: Tissue or cells.
Specimen Preparation: Formalin fix (10 percent neutral buffered formalin) and paraffin embed specimen (cells must be prepared into a cellblock). Protect paraffin block and/or slides from excessive heat. Transport tissue block or 5 unstained (3- to 5-micron thick sections), positively charged slides in a tissue transport kit (ARUP supply #47808). Available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787. (Min: 2 slides). If sending precut slides, do not oven bake.
Storage/Transport Temperature: Room temperature or refrigerated. Ship in cooled container during summer months.
Remarks: **IMMUNOHISTOCHEMISTRY ORDERING AND SUBMISSION DETAILS**: Submit electronic request. If you do not have electronic ordering capability, use an ARUP Immunohistochemistry Stain Form (#32978) with an ARUP client number. For additional technical details, contact ARUP Client Services at (800) 522-2787.
Unacceptable Conditions: Specimens submitted with non-representative tissue type. Depleted specimens. Decalcified specimens.
Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

Interpretive Data:

See Compliance Statement B: www.aruplab.com/CS

0070112 Proinsulin, Intact — PROINS

Specimen Required: Patient Prep: Patient must fast for 12-15 hours prior to collection.
Collect: Serum Separator Tube (SST) or Plain Red. Also acceptable: Lavender (K_2EDTA) or Pink (K_2EDTA).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL serum or plasma to an ARUP Standard Transport Tube and freeze immediately. (Min: 0.2 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered.**
Unacceptable Conditions: Grossly hemolyzed specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: Unacceptable; Refrigerated: 48 hours; Frozen: 2 months

0070256 Proinsulin, Intact/Insulin Ratio — PRO INS

Specimen Required: Patient Prep: Patient must be fasting for 12-15 hours prior to collection.
Collect: Serum Separator Tube (SST). Also acceptable: Lavender (K_2EDTA) or Pink (K_2EDTA).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL serum or plasma to an ARUP Standard Transport Tube and freeze immediately. (Min: 0.8 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered.**
Unacceptable Conditions: Heparinized plasma. Vitreous or I.V. fluids. Hemolyzed specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: Unacceptable; Refrigerated: 48 hours; Frozen: 2 months (avoid repeated freeze/thaw cycles)

2002109 Protein Electrophoresis with Reflex to Immunofixation, Serum — SPEP REFLEX

Performed: Sun-Sat
Reported: 1-5 days

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1.5 mL serum to an ARUP Standard Transport Tube. (Min: 1.5 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Plasma.
Stability (collection to initiation of testing): After separation from cells: Ambient: Unacceptable; Refrigerated: 1 week; Frozen: 1 month

0050640 Protein Electrophoresis, Serum — SPEP

Performed: Sun-Sat
Reported: 1-3 days

Specimen Required: Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1.5 mL serum to an ARUP Standard Transport Tube. (Min: 1 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Plasma.
Stability (collection to initiation of testing): After separation from cells: Ambient: Unacceptable; Refrigerated: 1 week; Frozen: 1 month

2007443 Rapid Plasma Reagin (RPR) with Reflex to RPR Titer or *T. pallidum* Antibody by Particle Agglutination — RPR REV

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL). Avoid freezing if possible.
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Plasma, CSF, or other body fluids.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0050471 Rapid Plasma Reagin (RPR) with Reflex to Titer — RPRT

Specimen Required: Collect: Serum separator tube.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Avoid freezing if possible.
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Plasma, CSF, or other body fluids.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0050478 Rapid Plasma Reagin (RPR) with Reflex to Titer and TP-PA Confirmation — RPR PAN

Specimen Required: Collect: Serum Separator Tube
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Avoid freezing if possible.
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Plasma, CSF, or other body fluids.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

New Test **3002514** **Reducing Substances - Fecal** **FEC RED**
Click for Pricing

Methodology: Qualitative Colorimetry
Performed: Sun-Sat
Reported: 1-2 days

Specimen Required: Collect: Stool.
Specimen Preparation: Transfer 5 g stool to an unpreserved stool transport vial (ARUP Supply #40910) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787. (Min: 1 g)
Storage/Transport Temperature: Frozen.
Unacceptable Conditions: Diapers. Stool containing barium. Specimens in media or preservatives.
Stability (collection to initiation of testing): Ambient: Unacceptable; Refrigerated: 1 week; Frozen: 2 week

Reference Interval: Normal

Note: Normal= negative or trace. Abnormal= 1+ through 4+

CPT Code(s): 84376

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0060122 **Respiratory Culture and Gram Stain** **MC RESP**

Performed: Sun-Sat
Reported: Negative at 3 days
Positives as soon as detected

Note: Gram stain, identification, and susceptibility tests are billed separately from culture. Testing is limited to the university of Utah Health Science Center only.

Refer to *Bordetella pertussis* Culture (ARUP test code 0060117), *Corynebacterium diphtheriae* Culture (ARUP test code 0060360), or *Legionella* Species, Culture (ARUP test code 0060113) for special instructions, if requested.

2008414 **ROS1 with Interpretation by Immunohistochemistry with Reflex to FISH if Equivocal or Positive** **ROS1 IP**

Performed: Mon-Fri
Reported: 1-5 days, add 3-5 days if reflexed

0080397 **Serotonin, Serum** **SEROT-SER**

Specimen Required: Patient Prep: Abstain from medications for 72 hours prior to collection.
Collect: Serum Separator Tube (SST).
Specimen Preparation: Separate from cells within 1 hour of collection. Transfer 0.5 mL serum to an ARUP Amber Transport Tube. (Min: 0.2 mL)
Storage/Transport Temperature: Frozen. Separate specimens must be submitted when multiple tests are ordered.
Unacceptable Conditions: Specimens other than serum. Non-frozen specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: Unacceptable; Refrigerated: 24 hours; Frozen: 1 month

2006258 **Sexually Transmitted Disease Panel 1 by Transcription-Mediated Amplification** **STD PANEL1**

Specimen Required: Patient Prep: **MultiTest Swab or ThinPrep Collection:** Patient must be 14 years of age or older.
Collect: Vaginal specimen collected with pink swab from Aptima MultiTest Swab Collection kit (ARUP supply #55224 PK/50 or #55229 PK/10) available online through eSupply using ARUP Connect or contact Client Services at (800) 522-2787.
Also acceptable: Cervical specimen collected with blue swab from Aptima Unisex Swab Specimen Collection kit (ARUP supply #28907 PK/50 or #54555 PK/10), first catch urine in sterile container or cervical brush in ThinPrep Pap test collection kit.
Refer to "Sample Collection for the Diagnosis of STD" under Specimen Handling at www.aruplab.com for specific specimen collection and transport instructions.
Specimen Preparation: **Swab:** Place swab in Swab Specimen Transport Tube, break shaft off at scoreline then recap tube.
Urine: Transfer 2 mL urine within 24 hours to Aptima Urine Specimen Transport Tube (ARUP supply #28908 PK/50 or #54556 PK/10). Liquid level must be between fill lines on tube.
ThinPrep: Vortex ThinPrep PreservCyt solution and transfer 1 mL to an Aptima Specimen Transfer Tube (ARUP supply #42711).
Storage/Transport Temperature: Refrigerated.
Remarks: **Specimen source is required.**
Unacceptable Conditions: Large white swab included in Aptima Unisex Swab Specimen Collection kit is for preparatory cleaning of the endocervix and is unacceptable for testing. Specimens in any transport media other than indicated above. Specimen in swab transport media without a swab.
Stability (collection to initiation of testing): **MultiTest or Unisex Swab:** Ambient: 2 months; Refrigerated: 2 months; Frozen: 1 year
Aptima Urine Specimen Transport Tube: Ambient: 1 month; Refrigerated: 1 month; Frozen: 3 months
Aptima Specimen Transfer Tube: Ambient: 2 weeks; Refrigerated: 1 month; Frozen: 1 year
ThinPrep: Ambient: 1 month; Refrigerated: 1 month; Frozen: Unacceptable

0091229 **Silver, Whole Blood** **SILVER BLD**

Specimen Required: Collect: Royal blue (No additive, K_2 or Na_2 EDTA).
Specimen Preparation: Protect from light. Transport 1 mL whole blood foil-wrapped in the original collection tube. (Min: 0.4 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Specimens not protected from light. Heparinized or clotted specimens.
Stability (collection to initiation of testing): Ambient: 2 weeks; Refrigerated: 2 weeks; Frozen: 2 weeks

0060134 **Stool Culture and *E. coli* Shiga-like Toxin by EIA** **MC SSC**

Performed: Sun-Sat
Reported: Negative at 5 days
Positives as soon as detected

0060135 **Stool Culture, *Campylobacter*** **MC CAMP**

Performed: Sun-Sat
Reported: Negative at 4 days
Positives as soon as detected

0060136 **Stool Culture, *Vibrio*** **MC VIB**

Performed: Sun-Sat
Reported: Negative at 4 days
Positives as soon as detected

0060137 **Stool Culture, *Yersinia*** **MC YERS**

Performed: Sun-Sat
Reported: Negative at 5 days
Positives as soon as detected

0060126 ***Streptococcus* (Group A) Culture** **MC STREP**

Performed: Sun-Sat
Reported: Negative at 3 days
Positives as soon as detected

0028903 ***Streptococcus* (Group A) Rapid by NAAT** **STREP SCN**

Specimen Required: Collect: Throat swab: Use swabs provided in the test kit. Also acceptable: Foam, polyester, HydraFlock, nylon flocked throat swabs and BBL CultureSwab Liquid Amies transport media.
Specimen Preparation: Place throat swab back in the original package, a clean dry plastic tube, or sleeve. Label the swab container and transport to the laboratory inside a specimen bag.
Storage/Transport Temperature: Room temperature.
Unacceptable Conditions: Specimens collected using any swab other than those listed. eSwab, or Rayon swabs. Specimens in Modified Stuart media (culturette or culturette II).
Stability (collection to initiation of testing): Ambient: 72 hours; Refrigerated: 72 hours; Frozen: Unacceptable

2003037 **Surveillance Culture** **MC SURV**

Performed: Sun-Sat
Reported: Negative at 3 days
Positives as soon as detected

New Test **3002633** ***TFE3* Gene Rearrangement by FISH** **TFE3_FISH**
Click for Pricing

Additional Technical Information

Methodology: Fluorescence in situ Hybridization
Performed: Mon-Fri
Reported: 3-7 days

Specimen Required: Collect: Tumor tissue.
Specimen Preparation: Formalin fix (10 percent neutral buffered formalin) and paraffin embed specimen. Protect paraffin block from excessive heat. Transport tissue block or 5 unstained (4- micron thick sections), positively charged slides in a tissue transport kit (ARUP supply #47808), available online through eSupply using ARUP Connector contact ARUP Client Services at (800) 522-2787 (kit recommended but not necessary). (Min: 2 slides)
Storage/Transport Temperature: Room temperature. Also acceptable: Refrigerated. Ship in cooled container during summer months.
Remarks: Include surgical pathology report.
Unacceptable Conditions: Specimens fixed or processed in alternative fixatives (alcohol, Prefer) or heavy metal fixatives (B-4 or B-5). No tumor in tissue. Decalcified specimens.
Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

Interpretive Data:
Refer to report.
See Compliance Statement A: www.aruplab.com/CS

CPT Code(s): 88366

New York DOH approval pending. Call for status update.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0060127 **Tissue Culture and Gram Stain** **MC TIS**

Performed: Sun-Sat
Reported: Negative at 6 days
Positives as soon as detected

Note: Gram stain, identification, and susceptibility tests are billed separately from culture. Anaerobe culture is NOT included with this order. Anaerobe culture is recommended for body fluids, tissue, and deep wound/surgical cultures. If anaerobe culture is needed, please order Anaerobe Culture (ARUP test code 0060143) and use anaerobic collection device for transportation. Testing is limited to the university of Utah Health Science Center only.

New Test **3002618** **Tumor Necrosis Factor – alpha, Plasma** **TNFA PLA**
Click for Pricing

Methodology: Quantitative Multiplex Bead Assay
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Green (lithium heparin).
Specimen Preparation: Separate plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Additional specimens must be submitted when multiple tests are ordered. Ship in ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
14.5 pg/mL or less

Interpretive Data:
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.
See Compliance Statement B: www.aruplab.com/CS

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

CPT Code(s): 83520

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0051539 Tumor Necrosis Factor – alpha, Serum — TNFA DO

Specimen Required: Collect: Serum separator tube, or plain red.
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Additional specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.**
Unacceptable Conditions: Refrigerated specimens. Contaminated or heat-inactivated specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year

Reference Interval:
Effective May 18, 2020
7.2 pg/mL or less

Note: Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0051539, Tumor Necrosis Factor – alpha from Tumor Necrosis Factor – alpha to Tumor Necrosis Factor – alpha, Serum.
There is a numeric map change associated with this test.
Change the numeric map for component 0051539, Tumor Necrosis Factor – alpha, Serum from XXXXXX to XXXXXX.X.

2011172 Urogenital Ureaplasma and Mycoplasma Species by PCR — UR MYCOPCR

HOTLINE NOTE: There is a prompt change associated with this test.
Change component 2011173, Ureaplasma and Mycoplasma Source from Resultable to Prompt.

2005416 Urticaria-Induced Basophil Activation — UIBA

Performed: Mon, Fri
Reported: 7-10 days

0065153 Vaginal Pathogen Panel by DNA Probe — VAGP

Performed: Sun-Sat
Reported: Within 3 days

New Test **3002581** **Vaginosis Panel by TMA** **VPAN TMA**
Click for Pricing

Specimen Collection and Handling

Methodology: Qualitative Transcription-Mediated Amplification

Specimen Required: Patient Prep: Patient must be 14 years of age or older.
Collect: Vaginal specimen collected with pink swab from Aptima MultiTest Swab Collection kit (ARUP supply #55224 PK/50 or #55229 PK/10) available online through eSupply using ARUP Connect or contact Client Services at (800) 522-2787.
Specimen Preparation: Place swab in MultiTest Swab Specimen Transport Tube, break shaft at scoreline, then recap tube.
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Specimens in any transport media other than indicated above. Specimen in MultiTest swab transport media without a swab.
Stability (collection to initiation of testing): Ambient: 30 days; Refrigerated: 30 days; Frozen: 90 days

Reference Interval: Negative.

Interpretive Data:
See report

CPT Code(s): 87801, 87481, 87661

New York DOH Approved.

HOTLINE NOTE: Refer to the Test Mix Addendum for interface build information.

0060363 **Vancomycin-Resistant *Enterococcus* (VRE) Culture** **MC VRE**

Performed: Sun-Sat
Reported: Negative at 4 days
Positives as soon as detected

2007136 **von Willebrand Factor Collagen Binding** **VWF C BIND**

Specimen Required: Collect: Light Blue (CTAD).
Specimen Preparation: Transfer 0.5 mL citrated plasma to an ARUP Standard Transport Tube. (Min: 0.3 mL)
Storage/Transport Temperature: **CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered.**
Unacceptable Conditions: Hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: Unacceptable; Refrigerated: Unacceptable; Frozen: 2 weeks

CPT Code(s): 83520

0040320 **White Blood Cell Count** **WBC**

Specimen Required: Collect: One 5 mL Lavender (K_2EDTA) or Pink (K_2 EDTA).
Specimen Preparation: Mix thoroughly. Transport 5 mL whole blood. (Min 0.25 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Clotted specimens.
Stability (collection to initiation of testing): Ambient: 24 hours; Refrigerated: 48 hours; Frozen: Unacceptable

0060132 **Wound Culture and Gram Stain** **MC W**

Performed: Sun-Sat
Reported: Negative at 5 days
Positives as soon as detected

HOTLINE: Effective May 18, 2020

The following will be discontinued from ARUP's test menu on May 18, 2020.
Replacement test options are supplied if applicable.

Test Number	Test Name	Refer To Replacement
2007210	Autoimmune Liver Disease Evaluation with Reflex to Smooth Muscle Antibody (SMA), IgG by IFA	Autoimmune Liver Disease Reflexive Panel (3002479)
2008597	Clobazam Quantitative, Serum or Plasma	Clobazam and Metabolite, Quantitative, Serum or Plasma (3002508)
0050198	Complement Activity Enzyme Immunoassay, Total	Complement Activity Total, (CH50) (3002575)
0090085	Digitoxin	Digitoxin Quantitative, Serum or Plasma (3002537)
2011632	Disopyramide, Serum or Plasma	
2007209	F-Actin and Mitochondrial M2 Antibodies, IgG by ELISA with Reflex to Smooth Muscle Antibody (SMA), IgG by IFA	Autoimmune Liver Disease Reflexive Panel (3002479)
2004331	HIV GenoSure MG	Human Immunodeficiency Virus Type 1 (HIV-1) GenoSure MG (3001242)
2011264	HLA Class I Panel (ABC) by Next Generation Sequencing	HLA Class I Panel (ABC) by Next Generation Sequencing (3002307)
2011272	HLA Class II Panel (*DRB1* and *DQB1*) by Next Generation Sequencing	HLA Class II Panel (*DRB1*, *DQA1* and *DQB1*) by Next Generation Sequencing (3002308)
2010808	Human Immunodeficiency Virus Type 1 (HIV-1) Drug Resistance (PhenoSense GT Plus Integrase)	Human Immunodeficiency Virus Type 1 (HIV-1) PhenoSense GT Plus Integrase (3001186)
2011942	Human Papillomavirus (HPV), High Risk by PCR, SurePath	Human Papillomavirus (HPV), High Risk with 16 and 18 Genotype by PCR, SurePath (2011933)
2011947	Human Papillomavirus (HPV), High Risk by PCR, ThinPrep	Human Papillomavirus (HPV), High Risk with 16 and 18 Genotype by PCR, ThinPrep (2011940)
0050615	Monoclonal Protein Detection Quantitation and Characterization, SPEP, IFE, IgA, IgG, IgM, Serum	Monoclonal Protein Study, Serum (3002568)
2002294	Multiple Myeloma Panel by FISH	Multiple Myeloma Panel by FISH (3002063)
2012130	Phosphatidylethanol (PEth)	Phosphatidylethanol (PEth), Whole Blood (3002598)
0020373	Reducing Substances, Fecal	Reducing Substances - Fecal (3002514)
2007085	Retinitis Pigmentosa/Leber Congenital Amaurosis Panel, Sequencing and Deletion/Duplication	
0093199	T-Cell Clonality by Flow Cytometry Analysis of TCR V-Beta	
2007063	Viral Meningitis Panel by PCR, Cerebrospinal Fluid	Enterovirus by PCR, Parechovirus by PCR, and Herpes Simplex Virus By PCR (0050249, 2005731, 0060041)
2007062	Viral Meningoencephalitis Panel by PCR, Cerebrospinal Fluid	Epstein-Barr Virus by Qualitative PCR, Cytomegalovirus by Qualitative PCR, Herpes Simplex Virus By PCR, Varicella-Zoster Virus by PCR (0050246, 0060040, 0060041, 0060042)
2013701	Vulvovaginal Candida Species by PCR	*Candida glabrata*, Candida species, and *Trichomonas vaginalis* by TMA (3002583)