ARUP LABORATORIES

Quarterly HOTLINE: Effective August 20, 2018

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
7	0060152	Acid-Fast Bacillus (AFB) Culture and AFB Stain				x								
8	2011248	Adalimumab Activity and Neutralizing Antibody								x				
8	2013605	Adalimumab Activity with Reflex to Antibody								x				
8	0050203	Albumin-Creatinine Ratio, Urine	x				x					x		
8	3000484	Aldosterone Inferior Vena Cava											x	
9	3000485	Aldosterone Left Adrenal Vein											x	
9	3000486	Aldosterone Right Adrenal Vein											x	
10	0021020	Alkaline Phosphatase Isoenzymes, Serum or Plasma			x									

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
10	0090284	Allergen, Food, Almond IgG						x						
10	2011723	Allergen, Food, Avocado IgG				x		x						
10	0097706	Allergen, Food, Baker's Yeast IgG						x						
10	0090286	Allergen, Food, Banana IgG						x						
10	0097707	Allergen, Food, Barley IgG						x						
10	0097708	Allergen, Food, Beef IgG			x			x						
10	2011725	Allergen, Food, Broccoli IgG				x		x						
10	0097653	Allergen, Food, Casein (Cow's Milk) IgG						x						
11	2011727	Allergen, Food, Cashew IgG				x		x						
11	2011817	Allergen, Food, Cheddar Cheese IgG				x		x						
11	2011729	Allergen, Food, Cheese Mold IgG						x						
11	0097656	Allergen, Food, Chicken IgG						x						
11	0097657	Allergen, Food, Chocolate IgG						x						
11	2011731	Allergen, Food, Clam IgG				x		x						
11	2011733	Allergen, Food, Coconut IgG				x		x						
12	0097302	Allergen, Food, Coffee IgG						x						
12	0097658	Allergen, Food, Corn IgG						x						
12	2011735	Allergen, Food, Crab IgG				x		x						
12	0097659	Allergen, Food, Egg White IgG						x						
12	0097315	Allergen, Food, Egg Yolk IgG						x						
12	0090287	Allergen, Food, Garlic IgG						x						
12	0090289	Allergen, Food, Gluten IgG						x						
12	0097651	Allergen, Food, Lettuce IgG						x						
12	2011737	Allergen, Food, Lobster IgG				x		x						
13	0097652	Allergen, Food, Malt IgG						x						
13	0097299	Allergen, Food, Mushroom IgG						x						
13	0097654	Allergen, Food, Oat IgG						x						
13	2011815	Allergen, Food, Olives IgG				x		x						
13	0097306	Allergen, Food, Onion IgG						x						
13	0097647	Allergen, Food, Orange IgG						x						
13	2011739	Allergen, Food, Oyster IgG				x		x						
13	0097648	Allergen, Food, Peanut IgG						x						
14	2011741	Allergen, Food, Pineapple IgG				x		x						
14	0097649	Allergen, Food, Pork IgG						x						

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
14	0097641	Allergen, Food, Potato (White) IgG				x		x	x					
14	0097323	Allergen, Food, Rice IgG						x						
14	0097642	Allergen, Food, Rye IgG						x						
14	2011743	Allergen, Food, Scallop IgG				x		x						
15	2011745	Allergen, Food, Shrimp IgG				x		x						
15	0097643	Allergen, Food, Soybean IgG						x						
15	2011747	Allergen, Food, Strawberry IgG				x		x						
15	2011749	Allergen, Food, Tuna IgG				x		x						
15	2011751	Allergen, Food, Turkey IgG				x		x						
16	2011753	Allergen, Food, Walnut IgG				x		x						
16	0097636	Allergen, Food, Wheat IgG						x						
16	0090291	Allergen, Food, Whey IgG						x						
16	2011819	Allergen, Food, Whole Egg, IgG				x		x						
16	0097773	Allergen, Fungi and Molds, *Alternaria tenuis* IgG						x						
16	0097305	Allergen, Fungi and Molds, *Aureobasidium pullulans* IgG						x						
16	0097304	Allergen, Fungi and Molds, *Candida albicans* IgG						x						
16	0097314	Allergen, Fungi and Molds, *Cladosporium* IgG						x						
16	0093454	Allergen, Fungi and Molds, *Fusarium proliferatum/moniliforme* IgG						x						
17	0097313	Allergen, Fungi and Molds, *Helminthosporium halodes/Setomelanomma rostrata* IgG						x						
17	0097316	Allergen, Fungi and Molds, *Mucor racemosus* IgG						x						
17	0097310	Allergen, Fungi and Molds, *Penicillium chrysogenum/notatum* IgG						x						
17	0097309	Allergen, Fungi and Molds, *Phoma betae* IgG						x						
17	0097307	Allergen, Fungi and Molds, *Rhizopus nigricans* IgG						x						
17	0055400	Allergen, Insects and Venom, Honey Bee IgG						x						
17	0055415	Allergen, Insects and Venom, Paper Wasp IgG						x						
17	0055405	Allergen, Insects and Venom, White-Faced Hornet IgG						x						
17	0055420	Allergen, Insects and Venom, Yellow Hornet IgG						x						
17	0055410	Allergen, Insects and Venom, Yellow Jacket IgG						x						
18	0097308	Allergen, *Stemphylium herbarum/botryosum*, IgG				x		x						
18	0097644	Allergen, Tomato IgG						x						
18	2007215	Allergens, Food, Common Panel IgG						x						

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18	2007213	Allergens, Food, Extended Panel IgG						x						
18	2007216	Allergens, Food, IgG Panel						x						
18	2007214	Allergens, Food, Meat Panel IgG						x						
18	2012001	Allergens, Insects and Venom, Hymenoptera Panel IgG						x						
19	2014284	Antimicrobial Susceptibility - Surveillance Carbapenemase Gene Detection by PCR											x	
19	2007335	Borrelia burgdorferi (Lyme Disease) Reflexive Panel (CSF)				x								
19	0055260	*Borrelia burgdorferi* Antibodies, IgG and IgM by Immunoblot (CSF)				x								
19	0099483	*Borrelia burgdorferi* Antibodies, Total by ELISA, CSF				x								
20	0055259	*Borrelia burgdorferi* Antibody, IgG by Immunoblot (CSF)				x								
20	0055258	*Borrelia burgdorferi* Antibody, IgM by Immunoblot (CSF)				x								
20	0051046	*Borrelia burgdorferi* C6 Peptide Antibodies, Total by ELISA (CSF)				x								
20	2010673	*CALR* (Calreticulin) Exon 9 Mutation Analysis by PCR									x			
20	2013901	*Candida FKS* Drug Resistance by Sequencing				x			x					
21	2013784	*Candida* Species by PCR with Reflex to *FKS* Drug Resistance by Sequencing			x	x								
21	3000531	Cerebral Autosomal Dominant Arteriopathy with Subcortical Infarcts and Leukoencephalopathy, CADASIL (*NOTCH3*), Sequencing											x	
42	0091267	Chloral Hydrate Metabolite, Serum or Plasma												x
22	3000059	*Coccidioides* Antibody by CF, CSF				x								
22	3000058	*Coccidioides immitis* by Immunodiffusion, CSF				x								
22	3000501	Cortisol, Inferior Vena Cava											x	
23	3000502	Cortisol, Left Adrenal Vein											x	
23	3000503	Cortisol, Right Adrenal Vein											x	
24	3000529	C-Peptide, Other											x	
24	0081312	Des-gamma-carboxy Prothrombin				x								
24	2008916	Encephalitis Panel with Reflex to Herpes Simplex Virus Types 1 and 2 Glycoprotein G-Specific Antibodies, IgG, CSF				x								
42	2013277	Esterase, Non-Specific Cytochemical Stain Only												x

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42	0092254	Estronex Profile, Urine												x
24	0090120	Ethanol, Serum or Plasma - Medical								x				
24	3000443	Ethyl Glucuronide, Umbilical Cord Tissue, Qualitative								x				
25	3000548	*FUS* (16p11) Gene Rearrangement by FISH											x	
25	2013577	Gastrointestinal Viral Panel by PCR			x									
26	0020725	Glomerular Filtration Rate, Estimated				x	x	x				x		
26	0080135	Glucose-6-Phosphate Dehydrogenase			x									
27	3000464	Glutamine Synthetase by Immunohistochemistry											x	
28	3000572	Hepatitis C Virus (HCV) by Quantitative NAAT											x	
29	3000576	Hepatitis C Virus (HCV) by Quantitative NAAT with Reflex to HCV Genotype by Sequencing											x	
30	3000577	Hepatitis C Virus (HCV) by Quantitative NAAT with Reflex to HCV High-Resolution Genotype by Sequencing											x	
42	2002685	Hepatitis C Virus (HCV) by Quantitative PCR with Reflex to HCV Genotype by Sequencing												x
42	2010793	Hepatitis C Virus (HCV) by Quantitative PCR with Reflex to HCV High-Resolution Genotype by Sequencing												x
31	2010784	Hepatitis C Virus Antibody by CIA with Reflex to HCV by Quantitative NAAT	x	x	x	x	x		x			x		
42	0098268	Hepatitis C Virus by Quantitative PCR												x
31	0055593	Hepatitis C Virus Genotype by Sequencing				x								
31	0050364	Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgG & IgM (CSF) with Reflex to Type 1 & 2 Glycoprotein G-Specific Ab, IgG				x								
31	0050408	Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgM by ELISA, CSF				x								
32	0050379	Herpes Simplex Virus Type 1 Glycoprotein G-Specific Antibody, IgG by ELISA, CSF				x								
32	0050359	Herpes Simplex Virus Type 2 Glycoprotein G-Specific Antibody, IgG by ELISA, CSF				x								
42	0091504	Hydrochlorothiazide Quantitative, Urine												x
32	3000477	Hypersensitivity Pneumonitis Panel											x	
33	3000539	Imatinib											x	
33	2008320	Infliximab and Infliximab-dyyb Activity and Neutralizing Antibody								x				
33	2013612	Infliximab and Infliximab-dyyb with Reflex to Antibody								x				

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
34	3000599	Kidney Profile											x	
34	0020516	Lactic Acid, CSF				x								
34	0051726	*Leishmania* Antibody, IgG (Visceral Leishmaniasis)		x			x							
35	2013716	LipoFit by NMR				x								
35	2013715	LipoFit by NMR, Particle Count Only				x								
35	0054441	Measles (Rubeola) Antibody, IgM, CSF				x								
42	2014510	Molybdenum Quantitative, Urin												x
35	0054443	Mumps Virus Antibody IgM, CSF				x								
35	3000523	Mumps Virus by PCR											x	
42	2009387	Mumps Virus RNA Qualitative, Real-Time PCR												x
42	2013273	Myeloperoxidase, Cytochemical Stain Only												x
36	2007190	Occult Blood, Fecal by Immunoassay									x			
42	2004067	p21 (Waf1/Cip 1) by Immunohistochemistry												x
36	3000197	PD-L1 22C3 IHC for Gastric/GEJ with Interpretation, pembrolizumab (KEYTRUDA)				x								
36	2013284	PD-L1 22C3 IHC for NSCLC by Immunohistochemistry with Interpretation, pembrolizumab (KEYTRUDA)				x								
36	2013025	Perampanel Quantitative, Serum or Plasma			x									
36	2012130	Phosphatidylethanol (PEth)								x				
36	0051622	Phosphatidylethanolamine Antibodies, IgG, IgM and IgA			x									
36	0051601	Phosphatidylethanolamine Antibody, IgA			x									
37	0051602	Phosphatidylethanolamine Antibody, IgG			x									
37	0051603	Phosphatidylethanolamine Antibody, IgM			x									
42	0051729	QuantiFERON-TB Gold In-Tube												x
37	3000400	QuantiFERON-TB Gold Plus, 1-Tube											x	
38	3000399	QuantiFERON-TB Gold Plus, 4-Tube											x	
38	0050371	*Rickettsia rickettsii* (Rocky Mountain Spotted Fever) Antibodies, IgG & IgM by IFA			x	x								
39	0050369	*Rickettsia rickettsii* (Rocky Mountain Spotted Fever) Antibody, IgG			x	x								
39	0050372	*Rickettsia rickettsii* (Rocky Mountain Spotted Fever) Antibody, IgM			x	x								
39	0050384	*Rickettsia typhi* (Typhus Fever) Antibodies, IgG & IgM by IFA			x	x								

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
39	0050381	*Rickettsia typhi* (Typhus Fever) Antibody, IgG by IFA			x	x								
40	0050383	*Rickettsia typhi* (Typhus Fever) Antibody, IgM by IFA			x	x								
42	0049180	Sezary Cell Exam												x
40	0099564	*Strongyloides* Antibody, IgG by ELISA, Serum				x	x					x		
42	2003133	Tapentadol and Metabolite, Serum or Plasma, Quantitative												x
40	3000584	Tapentadol, Free, Serum or Plasma											x	
42	0049060	Tartrate Resistant Acid Phosphatase Stain												x
42	2013275	Tartrate-Resistant Acid Phosphatase, Cytochemical Stain Only												x
42	0030268	Thrombotic Risk (Acquired) Reflexive Panel												x
41	0030177	Thrombotic Risk, Inherited Etiologies (Uncommon)					x							
42	0091433	Titanium, Urine												x
42	0091112	Tocainide Quantitation, Serum or Plasma												x
41	0051332	UDP Glucuronosyltransferase 1A1 (*UGT1A1*) Genotyping			x									
41	0054445	Varicella-Zoster Virus Antibody, IgM by ELISA (CSF)				x								

0060152 **Acid-Fast Bacillus (AFB) Culture and AFB Stain** **MC AFB**

Specimen Required: Patient Prep: Recommended collection: Three sputum specimens at 8-24 hour intervals (24 hours when possible) and at least one first-morning specimen. An individual order must be submitted for each specimen.
Collect: Respiratory specimens. Also acceptable: Body fluid, CSF, gastric aspirate, tissue, or urine.
Specimen Preparation: **Place each specimen in an individually sealed bag.**
Respiratory Specimens: Transfer (for each collection) 5-10 mL to a sterile container. (Min: 1 mL)
Body Fluids: Transfer 5 mL to a sterile container. (Min: 1 mL culture only)
CSF: Transfer 5 mL to a sterile container. (Min: 1 mL culture only. Min: 5 mL culture and stain)
Gastric Aspirates: Must be neutralized (pH7) with sodium carbonate if transport is delayed for more than four hours. Transfer 5-10 mL to a sterile container. (Min: 1 mL)
Tissue: Transfer to a sterile container. (Min: Visible)
Urine: Transfer at least 40 mL to a sterile container. (Min: 10 mL culture only. Min: 40 mL culture and stain)
Storage/Transport Temperature: Refrigerated.
Remarks: Specimen source required.
Unacceptable Conditions: Dry material or material collected and transported on a swab.
Acid Fast Stain: Stool, blood, bone marrow, grossly bloody specimens.
Stability (collection to initiation of testing): Ambient: 24 hours; Refrigerated: 1 week; Frozen: 1 week

2011248 **Adalimumab Activity and Neutralizing Antibody** **ADA NAB**

CPT Code(s): 80299; 82397

2013605 **Adalimumab Activity with Reflex to Antibody** **ADA DL R**

CPT Code(s): 80299, if reflexed add 82397

0050203 **Albumin-Creatinine Ratio, Urine** **ALB/CRT**

Reference Interval:

Test Number	Components	Reference Interval		
		Age	Male	Female
0020473	Creatinine, Urine - per 24h	3-8 years	140-700 mg/d	140-700 mg/d
		9-12 years	300-1300 mg/d	300-1300 mg/d
		13-17 years	500-2300 mg/d	400-1600 mg/d
		18-50 years	1000-2500 mg/d	700-1600 mg/d
		51-80 years	800-2100 mg/d	500-1400 mg/d
		81 years and older	600-2000 mg/d	400-1300 mg/d
	Creatinine, Urine - per volume	No reference interval		
	Albumin - mg/dL	No reference interval		
	Albumin - µg/minute	0-20 µg/minute		
	Albumin - mg/day	2-30 mg/day		
	Albumin/Creatinine Ratio	0-30 mg/g		

HOTLINE NOTE: There is a clinically significant charting name change associated with this test.
Change the charting name for component 0050583, Microalbumin - mg/dL to Albumin - mg/dL.
Change the charting name for component 0050678, Microalbumin/Creatinine Ratio to Albumin/Creatinine Ratio.
Change the charting name for component 0099081, Microalbumin - ug/minute to Albumin - ug/minute.
Change the charting name for component 0099082, Microalbumin - mg/day to Albumin - mg/day.

New Test Available Now **3000484** **Aldosterone Inferior Vena Cava** **ALDO IVC**

Additional Technical Information

Methodology: Quantitative Chemiluminescent Immunoassay
Performed: Sun-Sat
Reported: Within 24 hours

Specimen Required: Collect: Adrenal venous sampling procedure is required. 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: 0.5 mL)
Storage/Transport Temperature: Frozen.
Unacceptable Conditions: EDTA plasma.
Stability (collection to initiation of testing): After separation from cells: Ambient: 8 hours; Refrigerated: 5 days; Frozen: 1 month

Note: Refer to the Additional Technical Information link for more information on Endocrine Society recommendations regarding patient preparation, specimen collection, medications for hypertension control during confirmatory testing for primary aldosteronism, and factors that may lead to false-positive or false-negative aldosterone-renin ratio (ARR) results.

CPT Code(s): 82088

New York DOH Approved.

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

New Test Available Now **3000485** **Aldosterone Left Adrenal Vein** **ALDO LAV**

Additional Technical Information

Methodology: Quantitative Chemiluminescent Immunoassay
Performed: Sun-Sat
Reported: Within 24 hours

Specimen Required: Collect: Adrenal venous sampling procedure is required. 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: 0.5 mL)
Storage/Transport Temperature: Frozen.
Unacceptable Conditions: EDTA plasma.
Stability (collection to initiation of testing): After separation from cells: Ambient: 8 hours; Refrigerated: 5 days; Frozen: 1 month

Note: Refer to the Additional Technical Information link for information on Endocrine Society recommendations regarding patient preparation, specimen collection, medications for hypertension control during confirmatory testing for primary aldosteronism, and factors that may lead to false-positive or false-negative aldosterone-renin ratio (ARR) results.

CPT Code(s): 82088

New York DOH Approved.

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

New Test Available Now **3000486** **Aldosterone Right Adrenal Vein** **ALDO RAV**

Additional Technical Information

Methodology: Quantitative Chemiluminescent Immunoassay
Performed: Sun-Sat
Reported: Within 24 hours

Specimen Required: Patient Prep: Adrenal venous sampling procedure is 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: 0.5 mL)
Storage/Transport Temperature: Frozen.
Unacceptable Conditions: EDTA plasma.
Stability (collection to initiation of testing): After separation from cells: Ambient: 8 hours; Refrigerated: 5 days; Frozen: 1 month

Note: Refer to the Additional Technical Information for Endocrine Society recommendations for patient preparation, specimen collection, medications for hypertension control during confirmatory testing for primary aldosteronism, and factors that may lead to false-positive or false-negative aldosterone-renin ratio (ARR) results.

CPT Code(s): 82088

New York DOH Approved.

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

0021020 **Alkaline Phosphatase Isoenzymes, Serum or Plasma** **ALKP-ISO**

Performed: Sun-Sat
Reported: 1-4 days

0090284 **Allergen, Food, Almond IgG** **ALMOND IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011723 **Allergen, Food, Avocado IgG** **AVOCADOIGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097706 **Allergen, Food, Baker's Yeast IgG** **YEAST IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0090286 **Allergen, Food, Banana IgG** **BANANA IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097707 **Allergen, Food, Barley IgG** **BARLEY IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097708 **Allergen, Food, Beef IgG** **BEEF IGG**

Performed: Sun
Reported: 1-8 days

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011725 **Allergen, Food, Broccoli IgG** **BROCC IGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097653 **Allergen, Food, Casein (Cow's Milk) IgG** **CASEIN IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011727 **Allergen, Food, Cashew IgG** **CASHEW IGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011817 **Allergen, Food, Cheddar Cheese IgG** **CHEDCHEESE**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011729 **Allergen, Food, Cheese Mold IgG** **CHSMLD IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097656 **Allergen, Food, Chicken IgG** **CHICK IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097657 **Allergen, Food, Chocolate IgG** **CHOCO IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011731 **Allergen, Food, Clam IgG** **CLAM IGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011733 **Allergen, Food, Coconut IgG** **COCONUTIGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097302 **Allergen, Food, Coffee IgG** **COFFEE IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097658 **Allergen, Food, Corn IgG** **CORN IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011735 **Allergen, Food, Crab IgG** **CRAB IGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097659 **Allergen, Food, Egg White IgG** **EGG IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097315 **Allergen, Food, Egg Yolk IgG** **EGGYOLKIGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0090287 **Allergen, Food, Garlic IgG** **GARLIC IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0090289 **Allergen, Food, Gluten IgG** **GLUTEN IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097651 **Allergen, Food, Lettuce IgG** **LETT IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011737 **Allergen, Food, Lobster IgG** **LOBSTERIGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097652 **Allergen, Food, Malt IgG** **MALT IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097299 **Allergen, Food, Mushroom IgG** **MUSH IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097654 **Allergen, Food, Oat IgG** **OAT IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011815 **Allergen, Food, Olives IgG** **OLIVES IGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097306 **Allergen, Food, Onion IgG** **ONION IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097647 **Allergen, Food, Orange IgG** **ORANGE IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011739 **Allergen, Food, Oyster IgG** **OYSTER IGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097648 **Allergen, Food, Peanut IgG** **PEANUT IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011741 **Allergen, Food, Pineapple IgG** **PNAPPL IGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097649 **Allergen, Food, Pork IgG** **PORK IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097641 **Allergen, Food, Potato (White) IgG** **POTATO IGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 mL)
Storage/Transport Temperature: Refrigerated
Unacceptable Conditions: Hemolyzed, icteric, or lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 1 week; Refrigerated: 1 month; Frozen: 1 year

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

Note: The units of measure mcg/mL and mgA/L are interchangeable. 1 mg/L = 1000mcg/1000mL

0097323 **Allergen, Food, Rice IgG** **RICE IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097642 **Allergen, Food, Rye IgG** **RYE IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011743 **Allergen, Food, Scallop IgG** **SCALLOPIGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011745 **Allergen, Food, Shrimp IgG** **SHRIMP IGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097643 **Allergen, Food, Soybean IgG** **SOY IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011747 **Allergen, Food, Strawberry IgG** **STRWBRYIGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011749 **Allergen, Food, Tuna IgG** **TUNA IGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011751 **Allergen, Food, Turkey IgG** **TURKEY IGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011753 **Allergen, Food, Walnut IgG** **WALNUT IGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097636 **Allergen, Food, Wheat IgG** **WHEAT IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0090291 **Allergen, Food, Whey IgG** **WHEY IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2011819 **Allergen, Food, Whole Egg, IgG** **WHOLE EGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097773 **Allergen, Fungi and Molds, *Alternaria tenuis* IgG** **ALTER IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097305 **Allergen, Fungi and Molds, *Aureobasidium pullulans* IgG** **AUREO IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097304 **Allergen, Fungi and Molds, *Candida albicans* IgG** **CANDIDAIGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097314 **Allergen, Fungi and Molds, *Cladosporium* IgG** **CLADO IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0093454 **Allergen, Fungi and Molds, *Fusarium proliferatum/moniliforme* IgG** **FUS M IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097313	**Allergen, Fungi and Molds, *Helminthosporium halodes/Setomelanomma rostrata* IgG**	**HELMINIGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097316	**Allergen, Fungi and Molds, *Mucor racemosus* IgG**	**MUCOR IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097310	**Allergen, Fungi and Molds, *Penicillium chrysogenum/notatum* IgG**	**PENI N IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097309	**Allergen, Fungi and Molds, *Phoma betae* IgG**	**PHOMAB IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097307	**Allergen, Fungi and Molds, *Rhizopus nigricans* IgG**	**RHIZO IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0055400	**Allergen, Insects and Venom, Honey Bee IgG**	**HON B IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0055415	**Allergen, Insects and Venom, Paper Wasp IgG**	**PAP-W IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0055405	**Allergen, Insects and Venom, White-Faced Hornet IgG**	**WH F IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0055420	**Allergen, Insects and Venom, Yellow Hornet IgG**	**YE F IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0055410	**Allergen, Insects and Venom, Yellow Jacket IgG**	**YEL J IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097308 **Allergen, *Stemphylium herbarum/botryosum*, IgG** **STEMPHBIGG**

Specimen Required: Collect: Serum separator tube (SST).
Specimen Preparation: Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP Standard Transport Tube. (Min: 0.2 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

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

0097644 **Allergen, Tomato IgG** **TOMATO IGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2007215 **Allergens, Food, Common Panel IgG** **G FOOD COM**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2007213 **Allergens, Food, Extended Panel IgG** **G FOOD PAN**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2007216 **Allergens, Food, IgG Panel** **IGG FOOD**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2007214 **Allergens, Food, Meat Panel IgG** **IGG MEATS**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

2012001 **Allergens, Insects and Venom, Hymenoptera Panel IgG** **BEE PANIGG**

Interpretive Data: Values less than 2.00 mcg/mL represent absent or undetectable levels of allergen-specific IgG antibody.
See Compliance Statement B: www.aruplab.com/CS

New Test **2014284** **Antimicrobial Susceptibility - Surveillance Carbapenemase Gene Detection by PCR** **CARBA SWAB**

Available Now

Methodology: Qualitative Polymerase Chain Reaction
Performed: Sun-Sat
Reported: 1-4 days

Specimen Required: Collect: Rectal eSwab. Refer to collection instructions at https://www.aruplab.com/Specimen-Handling/resources/pdf/rectal-eswab.pdf
Specimen Preparation: Transport rectal swab in eSwab transport media (ARUP Supply #45877) available online through eSupply using ARUP ConnectTM or contact ARUP Client Services at (800) 522-2787. Place each specimen in an individually sealed bag.
Storage/Transport Temperature: Refrigerated. Also acceptable: Frozen.
Remarks: Specimen source required.
Stability (collection to initiation of testing): Ambient: 48 hours; Refrigerated: 6 days; Frozen: 6 days

Reference Interval: Not Detected

Interpretive Data:
This assay detects five carbapenemase gene families (*blaKPC, blaNDM, blaOXA-48, blaVIM, blaIMP*) encoding enzymes that may confer resistance to carbapenem and other beta-lactam antibiotics. This assay is intended for use as an aid to infection control in the detection of carbapenem-resistant bacteria and is not intended to guide or monitor treatment of infection. A negative result does not exclude the presence of other resistance mechanisms or assay-specific nucleic acid in concentrations below the level of detection.
See Compliance Statement B: www.aruplab.com/CS

Note: This assay will generate a negative IMP result when testing samples containing IMP-7, IMP-13 or IMP-14 gene sequences, and may detect IMP-4 at reduced sensitivity. False-negative results may be encountered in rectal specimens with *Pseudomonas aeruginosa* containing the *blaVIM* gene and with *Acinetobacter baumanii* containing *blaIMP* gene.

CPT Code(s): 87798

New York DOH approval pending. Call for status update.

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

2007335 **Borrelia burgdorferi (Lyme Disease) Reflexive Panel (CSF)** **LYMECSFR**

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 6 mL CSF to an ARUP Standard Transport Tube. (Min: 2.5 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, heat-inactivated, or hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: 8 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0055260 ***Borrelia burgdorferi* Antibodies, IgG and IgM by Immunoblot (CSF)** **LYME WBCSF**

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 3 mL CSF to an ARUP Standard Transport Tube. (Min: 2 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, heat-inactivated, or hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: 8 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0099483 ***Borrelia burgdorferi* Antibodies, Total by ELISA, CSF** **LYME CSF**

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 3 mL CSF to an ARUP Standard Transport Tube. (Min: 0.5 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, heat-inactivated, or hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: 8 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0055259 ***Borrelia burgdorferi* Antibody, IgG by Immunoblot (CSF)** **LYMEGWBCSF**

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 3 mL CSF to an ARUP Standard Transport Tube. (Min: 2 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, heat-inactivated, or hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: 8 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0055258 ***Borrelia burgdorferi* Antibody, IgM by Immunoblot (CSF)** **LYMEMWBCSF**

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 3 mL CSF to an ARUP Standard Transport Tube. (Min: 2 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Contaminated, heat-inactivated, or hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: 8 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

0051046 ***Borrelia burgdorferi* C6 Peptide Antibodies, Total by ELISA (CSF)** **C6 PEP CSF**

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 3 mL CSF to an ARUP Standard Transport Tube. (Min: 0.3 mL)
Storage/Transport Temperature: Refrigerated.
Remarks: Indicate source on test requisition.
Unacceptable Conditions: Specimen types other than CSF. Contaminated, heat-inactivated, or hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: 8 hours; Refrigerated: 2 weeks; Frozen 1 year

2010673 ***CALR* (Calreticulin) Exon 9 Mutation Analysis by PCR** **CALR**

HOTLINE NOTE: There is a component change associated with this test.
Remove component 2010674, CALR Exon 9 Mutation Analysis - Source

2013901 ***Candida FKS* Drug Resistance by Sequencing** **FKS SEQ**

Specimen Required: Collect: Body fluid, tissue, or pure isolate of *Candida* species on potato dextrose agar (PDA), sabouraud dextrose agar, sheep blood agar, chocolate agar, or inhibitory mold agar.
Specimen Preparation: **Body Fluid:** Transfer 1 mL body fluid to a sterile container. (Min: 0.5 mL)
Tissue: Transfer to a sterile container and freeze immediately.
Isolate: Transport sealed container with pure isolate on solid media. Place each specimen in an individually sealed bag.
Storage/Transport Temperature: **Body Fluid or Tissue:** Frozen.
Isolate: Refrigerated.
Remarks: *Candida* species identification is required. Specimen source is required.
Unacceptable Conditions: Plasma or serum. Mixed cultures or isolates other than suspected *Candida* species. *Candida* species identified as *C. dubliniensis*. Isolates with no visible colonies. Isolates plated on Chromagar chromogenic culture media.
Stability (collection to initiation of testing): **Body Fluid**: Ambient: 2 weeks; Refrigerated: 2 weeks; Frozen: 2 weeks
Tissue: Ambient: Unacceptable; Refrigerated: Unacceptable; Frozen: 2 weeks
Isolate: Ambient: 1 week; Refrigerated: 2 weeks; Frozen: Unacceptable

Note: If the *Candida* species is other than *C. albicans, C. glabrata, C. krusei, C. parapsilosis,* and *C. tropicalis,* testing will be canceled. If *Candida* species is not available, order *Candida* Species by PCR with Reflex to *FKS* Drug Resistance by Sequencing (ARUP test code 2013784). This test may be unsuccessful if the specimen or isolate does not contain *C. albicans, C. glabrata, C. krusei, C. parapsilosis, C. tropicalis,* or if multiple *Candida* species are present.

2013784 ***Candida*** **Species by PCR with Reflex to *FKS* Drug Resistance by Sequencing** **CAND RFX**

Performed: Sun-Sat
Reported: 7-10 days

Specimen Required: Collect: Body fluid, tissue, or pure isolate of *Candida* species on potato dextrose agar (PDA), sabouraud dextrose agar, sheep blood agar, chocolate agar, or inhibitory mold agar.
Specimen Preparation: **Body Fluid:** Transfer 2 mL body fluid to a sterile container. (Min: 1.5 mL)
Tissue: Transfer to a sterile container and freeze immediately.
Isolate: Transport sealed container with pure isolate on solid media. Place each specimen in an individually sealed bag.
Storage/Transport Temperature: **Body Fluid or Tissue**: Frozen**.**
Isolate: Refrigerated.
Remarks: Specimen source required.
Unacceptable Conditions: Plasma or serum. Mixed cultures or isolates other than suspected *Candida* species. Isolates with no visible colonies. Isolates plated on CHROMagar chromogenic culture media.
Stability (collection to initiation of testing): **Body Fluid**: Ambient: 2 weeks; Refrigerated: 2 weeks; Frozen: 2 weeks
Tissue: Ambient: Unacceptable; Refrigerated: Unacceptable; Frozen: 2 weeks **Isolate:** Ambient: 1 week; Refrigerated; 2 weeks; Frozen: Unacceptable

New Test **3000531** **Cerebral Autosomal Dominant Arteriopathy with Subcortical Infarcts and Leukoencephalopathy, CADASIL (*NOTCH3*), Sequencing** **NOTCH3 FGS**

Methodology: Polymerase Chain Reaction/Sequencing
Performed: Sun-Sat
Reported: Within 2 weeks

Specimen Required: Collect: Lavender (EDTA), Pink (K_2EDTA), or Yellow (ACD).
Specimen Preparation: Transport 3 mL whole blood. (Min: 1 mL)
Storage/Transport Temperature: Refrigerated.
Stability (collection to initiation of testing): Ambient: 1 week; Refrigerated: 1 month; Frozen: 6 months

Interpretive Data:
Background Information for Cerebral Autosomal Dominant Arteriopathy with Subcortical Infarcts and Leukoencephalopathy, CADASIL (*NOTCH3*), Sequencing:
Characteristics: Subcortical ischemic events, including transient ischemic attacks (TIAs) and strokes, are the most common presentation of CADASIL and present in approximately 85 percent of affected individuals. Cognitive defects and dementia are observed in 75 percent of affected individuals, migraines in 35 percent, psychiatric and mood disorders in 33 percent, and epilepsy in 10 percent. Age of onset and clinical presentation are highly variable.
Prevalence: 2-4 in 100,000.
Inheritance: Autosomal dominant.
Cause: Pathogenic variants in the *NOTCH3* gene.
Clinical Sensitivity: 95 percent.
Methodology: Bidirectional sequencing of *NOTCH3* coding regions and intron/exon boundaries.
Analytical Sensitivity: 99 percent.
Limitations: Diagnostic errors can occur due to rare sequence variations. Regulatory region variants and large deletion/duplications in the *NOTCH3* gene will not be detected.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement C: aruplab.com/CS

CPT Code(s): 81406

New York DOH approval pending. Call for status update.

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

3000059 ***Coccidioides* Antibody by CF, CSF** **COCCICFCSF**

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 1 mL CSF to an ARUP Standard Transport Tube. (Min: 0.6 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: Contaminated, hemolyzed, xanthochromic, 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)

3000058 ***Coccidioides immitis* by Immunodiffusion, CSF** **COCCIP CSF**

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 1 mL CSF to an ARUP Standard Transport Tube. (Min: 0.6 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)

New Test
Available Now

3000501 **Cortisol, Inferior Vena Cava** **CORT IVC**

Methodology: Quantitative Chemiluminescent Immunoassay
Performed: Sun-Sat
Reported: Within 24 hours

Specimen Required: Patient Prep: Adrenal venous sampling procedure is required.
Collect: Serum separator tube (SST).
Specimen Preparation: Allow specimen to clot completely at room temperature. 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: Refrigerated.
Stability (collection to initiation of testing): After separation from cells: Ambient: 1 week; Refrigerated: 1 week; Frozen: 3 months

Note: To convert to nmol/L, multiply µg/dL by 27.6.

CPT Code(s): 82533

New York DOH Approved.

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

New Test Available Now **3000502** **Cortisol, Left Adrenal Vein** **CORT LAV**

Methodology: Quantitative Chemiluminescent Immunoassay
Performed: Sun-Sat
Reported: Within 24 hours

Specimen Required: Patient Prep: Adrenal venous sampling procedure is required.
Collect: Serum Separator Tube (SST).
Specimen Preparation: Allow specimen to clot completely at room temperature. 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: Refrigerated.
Stability (collection to initiation of testing): After separation from cells: Ambient: 1 week; Refrigerated: 1 week; Frozen: 3 months

Note: To convert to nmol/L, multiply µg/dL by 27.6.

CPT Code(s): 82533

New York DOH Approved.

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

New Test Available Now **3000503** **Cortisol, Right Adrenal Vein** **CORT RAV**

Methodology: Quantitative Chemiluminescent Immunoassay
Performed: Sun-Sat
Reported: Within 24 hours

Specimen Required: Patient Prep: Adrenal venous sampling procedure is required.
Collect: Serum Separator Tube (SST).
Specimen Preparation: Allow specimen to clot completely at room temperature. 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: Refrigerated.
Stability (collection to initiation of testing): After separation from cells: Ambient: 1 week; Refrigerated: 1 week; Frozen: 3 months

Note: To convert to nmol/L, multiply µg/dL by 27.6.

CPT Code(s): 82533

New York DOH Approved.

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

New Test Available Now

3000529 **C-Peptide, Other** **CPEPOTHER**

Methodology: Quantitative Chemiluminescent Immunoassay
Performed: Sun-Sat
Reported: Within 24 hours

Specimen Required: Patient Prep: Fasting specimen preferred.
Collect: Serum Separator Tube (SST) or Plasma Separator Tube (PST). Also acceptable: Green (Sodium or Lithium Heparin), Lavender (EDTA), or Pink (K_2EDTA).
Specimen Preparation: Allow specimen to clot completely at room temperature. Separate from cells ASAP or within 2 hours of collection. Transport 1 mL serum or plasma in an ARUP Standard Transport Tube. (Min: 0.5 mL)
Storage/Transport Temperature: Frozen.
Unacceptable Conditions: Grossly hemolyzed specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 8 hours; Refrigerated: 48 hours; Frozen: 1 month

Reference Interval: Not established.

Interpretive Data: The reference interval for fasting c-peptide is 0.8-3.5 ng/mL. To convert to nmol/L, multiply ng/mL by 0.33.

CPT Code(s): 84681

New York DOH Approved.

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

0081312 **Des-gamma-carboxy Prothrombin** **DCP**

Specimen Required: Collect: Plain red or serum separator tube.
Specimen Preparation: Allow specimen to clot completely at room temperature. Separate 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: 8 hours; Refrigerated: 1 week; Frozen: 3 weeks (avoid repeated freeze/thaw cycles)

2008916 **Encephalitis Panel with Reflex to Herpes Simplex Virus Types 1 and 2 Glycoprotein G-Specific Antibodies, IgG, CSF** **ENCEPHCSF**

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 3 mL CSF to an ARUP Standard Transport Tube. (Min: 1.05 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Serum or plasma. Contaminated, heat-inactivated, or hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: 8 hours; Refrigerated: 2 weeks; Frozen: 1 year

0090120 **Ethanol, Serum or Plasma - Medical** **ETOH**

CPT Code(s): 80320 (Alt code: G0480)

3000443 **Ethyl Glucuronide, Umbilical Cord Tissue, Qualitative** **ETG QQQ CD**

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

New Test Available Now | **3000548** | ***FUS* (16p11) Gene Rearrangement by FISH** | **FUS FISH**

Additional Technical Information

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

Specimen Required: Collect: Tumor tissue.
Specimen Preparation: Formalin fix (10 percent neutral buffered formalin) and paraffin embed tumor tissue. Transport tissue block or 4 unstained, consecutively cut, 5-micron thick sections, mounted on positively charged glass slides. (Min: 4 slides) Protect paraffin block and/or slides from excessive heat.
Storage/Transport Temperature: Room temperature. Also acceptable: Refrigerated.
Remarks: Include surgical pathology report with reason for referral. The laboratory will not reject specimens that arrive without a pathology report but will hold the specimen until this information is received.
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

Reference Interval: By report

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.

2013577 | **Gastrointestinal Viral Panel by PCR** | **GIVIRALPCR**

Performed: Tue, Thu, Sat
Reported: 2-5 days

0020725 Glomerular Filtration Rate, Estimated GFRE

Specimen Required: Collect: Plasma separator tube or serum separator tube. Also acceptable: Lavender (EDTA).
Specimen Preparation: Allow specimen to clot completely at room temperature. Separate serum or plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL serum or plasma to an ARUP Standard Transport Tube. (Min: 0.2 mL)
Storage/Transport Temperature: Refrigerated.
Remarks: Patient age and sex are required for calculation.
Unacceptable Conditions: Specimens obtained through catheters used to infuse hyperalimentation fluid. Specimens collected with potassium oxalate/sodium fluoride or sodium citrate.
Stability (collection to initiation of testing): After separation from cells: Ambient: 1 week; Refrigerated: 1 week; Frozen: 3 months

Reference Interval:
Effective August 20, 2018
Calculated GFR - >= 60 mL/min / 1.73 squared meters

Creatinine

Age	Male	Female
0-30 days	0.50-1.20 mg/dL	0.50-0.90 mg/dL
31-364 days	0.40-0.70 mg/dL	0.40-0.60 mg/dL
1-3 years	0.40-0.70 mg/dL	0.40-0.70 mg/dL
4-6 years	0.50-0.80 mg/dL	0.50-0.80 mg/dL
7-9 years	0.30-0.60 mg/dL	0.30-0.70 mg/dL
10-11 years	0.30-0.70 mg/dL	0.40-0.80 mg/dL
12-13 years	0.40-0.80 mg/dL	0.40-0.80 mg/dL
14-15 years	0.40-1.10 mg/dL	0.30-0.90 mg/dL
16-18 years	0.60-1.20 mg/dL	0.50-1.00 mg/dL
19 years and older	0.40-1.20 mg/dL	0.40-1.20 mg/dL

Interpretive Data: The CKD-EPI equation for non-African American individuals is used to calculate the estimated glomerular filtration rate (GFR). To estimate the GFR for African Americans, multiply the provided GFR result by 1.16.

The CKD-EPI equation is validated in individuals 18 years of age and older. It is less accurate in patients with extremes of muscle mass, restriction of dietary protein, ingestion of creatine, extra-renal metabolism of creatinine, or treatment with medications that affect renal tubular creatinine secretion.

GFR Categories in Chronic Kidney Disease (CKD)

GFR Category	GFR (mL/min/1.73 square meters)	Terms
G1	Greater than or equal to 90	Normal or high*
G2	60-89	Mildly decreased*
G3a	45-59	Mildly to moderately decreased
G3b	30-44	Moderately to severely decreased
G4	15-29	Severely decreased
G5	Less than 15	Kidney failure
*In the absence of evidence of kidney damage, neither GFR category G1 nor G2 fulfill the criteria for CKD (Kidney Int Suppl 2013;3:1-150)		

HOTLINE NOTE: There is a numeric map and unit of measure change associated with this test.
Change the numeric map for component 0026634, Calculated GFR from XXXXXX.X to XXXXXX.
Change the unit of measure for component 0026634, Calculated GFR from mL/min to mL/min/1.73BSA.

0080135 Glucose-6-Phosphate Dehydrogenase G6PD

Performed: Sun-Sat
Reported: 1-3 days

New Test Available Now | **3000464** | **Glutamine Synthetase by Immunohistochemistry** | **GLUTSN IHC**

Immunohistochemistry Stain Form Recommended (ARUP form #32978)

Methodology: Immunohistochemistry
Performed: Mon-Fri
Reported: 1-5 days

Specimen Required: Collect: Tissue or cells.
Specimen Preparation: Formalin fix (10% neutral buffered formalin is preferred) and paraffin embed specimen (cells must be prepared into a cellblock). Protect paraffin from excessive heat. Transport tissue block or 5 unstained (3-5 micron thick sections), on positively charged slides (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 (form #32978) with an ARUP client number. For additional technical details, please contact ARUP Client Services.
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 A: www.aruplab.com/CS

Note: All stains will be handled as "Stain and Return" unless a consultation is requested. To request a consultation, submit the pathology report, all associated case materials (clinical history, blocks, slides, etc.), and the Anatomic Pathology requisition form (form # 32960).

CPT Code(s): 88342

New York DOH approval pending. Call for status update.

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

New Test **3000572** **Hepatitis C Virus (HCV) by Quantitative NAAT** **HEPC QNT**

Additional Technical Information

Methodology: Quantitative Transcription Mediated Amplification
Performed: Sun-Sat
Reported: 1-3 days

Specimen Required: Collect: Lavender (EDTA), Pink (K_2EDTA), Yellow (ACD), Plasma Preparation Tube (PPT), or Serum Separator Tube (SST).
Specimen Preparation: Separate from cells within 6 hours of collection. Transfer 2 mL serum or plasma to an ARUP Standard Transport Tube. (Min: 1.2 mL)
Storage/Transport Temperature: Frozen.
Unacceptable Conditions: Heparinized specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: Unacceptable; Refrigerated: 5 days; Frozen: 2 months

Reference Interval: Not Detected

Interpretive Data:
Normal range for this assay is “Not Detected”.
The quantitative range of this assay is 10 - 100,000,000 IU/mL (1.0 – 8.0 log IU/mL).

Lower limit of quantitation (LLoQ):
10 IU/mL (1.0 log IU/mL)
LLoQ values do not apply to diluted specimens.
A result of "Not Detected" does not rule out the presence of inhibitors in the patient specimen or hepatitis C virus RNA concentrations below the level of detection of the test. Care should be taken when interpreting any single viral load determination.

This test should not be used for blood donor screening, associated re-entry protocols, or for screening Human Cell, Tissues and Cellular Tissue-Based Products (HCT/P).

Note: The limit of quantification for this RNA assay is 10 IU/mL (1.0 log IU/mL). If the assay DID NOT DETECT the virus, the test result will be reported as "Not Detected" If the assay DETECTED the presence of the virus but was not able to accurately quantify the number of copies, the test result will be reported as "< 10 Detected".

Specimens received with less than minimum volume for testing will automatically be run with a dilution according to the guidelines below:
-Specimens with 240-700 µL will be diluted 1:3 resulting in a quantitative range of 30 - 300,000,000 IU/mL (1.48-8.48 log IU/mL) .

This test is intended for use as an aid in the management of HCV-infected patients undergoing anti-viral therapy in conjunction with clinical and laboratory markers of infection. This test is also used in assessing HCV RNA levels at baseline, during treatment, at the end of treatment, and at the end of follow up of treatment to determine sustained or non-sustained viral response.

CPT Code(s): 87522

New York DOH Approved.

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

New Test **3000576** **Hepatitis C Virus (HCV) by Quantitative NAAT with Reflex to HCV Genotype by Sequencing** **HCVQT GR**

Additional Technical Information

Methodology: Quantitative Transcription Mediated Amplification/Sequencing
Performed: Sun-Sat
Reported: 1-8 days

Specimen Required: Collect: Lavender (EDTA), Pink (K_2EDTA), Plasma Preparation Tube (PPT), or Serum Separator Tube (SST).
Specimen Preparation: Separate from cells within 6 hours of collection. Transfer 3 mL serum or plasma to an ARUP Standard Transport Tube. (Min: 1.7 mL)
Storage/Transport Temperature: Frozen.
Unacceptable Conditions: Heparinized specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: Unacceptable; Refrigerated: 72 hours; Frozen: 6 weeks

Reference Interval:

Available Separately	Components	Reference Interval
3000572	Hepatitis C Virus by Quantitative NAAT	Not Detected
0055593	Hepatitis C Virus Genotype by Sequencing	By report

Interpretive Data: Refer to report.

Note: If Hepatitis C Virus by Quantitative NAAT result is greater than or equal to 4,000 IU/mL, then Hepatitis C Virus Genotype by Sequencing will be added. Additional charges apply.

CPT Code(s): 87522; if reflexed, add 87902

New York DOH Approved.

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

New Test **3000577** **Hepatitis C Virus (HCV) by Quantitative NAAT with Reflex to HCV High-Resolution Genotype by Sequencing** **HCVQT HGR**

Additional Technical Information

Methodology: Quantitative Transcription Mediated Amplification/Sequencing
Performed: Sun-Sat
Reported: 1-11 days

Specimen Required: Collect: Lavender (EDTA), Pink (K_2EDTA), Plasma Preparation Tube (PPT), or Serum Separator Tube (SST).
Specimen Preparation: Separate from cells within 6 hours of collection. Transfer 3 mL serum or plasma to an ARUP Standard Transport Tube. (Min: 1.7 mL)
Storage/Transport Temperature: Frozen.
Unacceptable Conditions: Heparinized specimens.
Stability (collection to initiation of testing): After separation from cells. Ambient: Unacceptable; Refrigerated: 72 hours; Frozen: 6 weeks

Reference Interval:

Available Separately	Components	Reference Interval
3000572	Hepatitis C Virus by Quantitative NAAT	Not Detected
2006898	Hepatitis C Virus High-Resolution Genotype by Sequencing	By report

Interpretive Data: Refer to report.

Note: If Hepatitis C Virus by Quantitative NAAT result is greater than or equal to 100,000 IU/mL, then Hepatitis C Virus High-Resolution Genotype by Sequencing will be added. Additional charges apply.

CPT Code(s): 87522; if reflexed, add 87902

New York DOH Approved.

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

2010784 Hepatitis C Virus Antibody by CIA with Reflex to HCV by Quantitative NAAT — HCV AB QR

Methodology: Qualitative Chemiluminescent Immunoassay/Quantitative Transcription Mediated Amplification
Performed: Sun-Sat
Reported: Within 48 hours
If reflexed, add 1-3 days

Specimen Required: Collect: Serum Separator Tube (SST). Also acceptable: Lavender (EDTA) or Pink (K_2EDTA).
Specimen Preparation: Separate from cells within 6 hours of collection. Transfer 2.5 mL serum or plasma to an ARUP Standard Transport Tube. (Min: 1.5 mL)
Storage/Transport Temperature: Frozen.
Unacceptable Conditions: Specimens containing particulate material. Severely hemolyzed, heat-inactivated, or lipemic specimens. Heparinized plasma.
Stability (collection to initiation of testing): After separation from cells: Ambient: Unacceptable; Refrigerated: 5 days; Frozen: 2 months (avoid freeze/thaw cycles)

Reference Interval:
Effective August 20, 2018

Test Number	Components	Reference Interval	
2002483	Hepatitis C Virus Antibody by CIA	Negative	
	Hepatitis C Antibody by CIA Index	0.79 IV or less	Negative
		0.80 to 0.99 IV	Equivocal
		1.00 to 10.99 IV	Low Positive
		11.00 IV or greater	High Positive
3000572	Hepatitis C Virus (HCV) by Quantitative NAAT	Not Detected	

Note: If the anti-HCV screening result is low positive or high positive, the Hepatitis C Virus by Quantitative NAAT will be added. Additional charges apply.

HOTLINE NOTE: There is a reflexive pattern change associated with this test.
Remove reflex to 0098268, Hepatitis C Virus by Quantitative PCR.
Add reflex to 3000572, Hepatitis C Virus (HCV) by Quantitative NAAT.

0055593 Hepatitis C Virus Genotype by Sequencing — HEPCGENO

Specimen Required: Collect: Lavender (EDTA), Pink (K_2EDTA), Plasma Preparation Tube (PPT) or Serum Separator Tube (SST).
Specimen Preparation: Separate from cells within 6 hours of collection. Transfer 2 mL serum or plasma to an ARUP Standard Transport Tube. (Min: 0.5 mL)
Storage/Transport Temperature: Frozen.
Remarks: Please submit most recent viral load and test date, if available.
Unacceptable Conditions: Heparinized specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: Unacceptable; Refrigerated: 72 hours; Frozen: 4 months

0050364 Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgG & IgM (CSF) with Reflex to Type 1 & 2 Glycoprotein G-Specific Ab, IgG — HERPRCSF

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 1 mL CSF to an ARUP Standard Transport Tube. (Min: 0.5 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Specimen types other than CSF. Contaminated, heat-inactivated, or hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: 8 hours; Refrigerated: 2 weeks; Frozen: 1 year

0050408 Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgM by ELISA, CSF — HSVMCCSF

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 0.5 mL CSF to an ARUP Standard Transport Tube. (Min: 0.2 mL)
Storage/Transport Temperature: Refrigerated.
Remarks: Indicate source on test request form.
Unacceptable Conditions: Specimen types other than CSF. Contaminated, heat-inactivated, or hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: 8 hours; Refrigerated: 2 weeks; Frozen: 1 year

0050379 **Herpes Simplex Virus Type 1 Glycoprotein G-Specific Antibody, IgG by ELISA, CSF** **HERPICSF**

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 0.5 mL CSF to an ARUP Standard Transport Tube. (Min: 0.2 mL)
Storage/Transport Temperature: Refrigerated.
Remarks: Indicate source on test request form.
Unacceptable Conditions: Specimen types other than CSF. Contaminated, heat-inactivated, or hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: 8 hours; Refrigerated: 2 weeks; Frozen: 1 year

0050359 **Herpes Simplex Virus Type 2 Glycoprotein G-Specific Antibody, IgG by ELISA, CSF** **HERPIICSF**

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 0.5 mL CSF to an ARUP Standard Transport Tube. (Min: 0.2 mL)
Storage/Transport Temperature: Refrigerated.
Remarks: Indicate source on test request form.
Unacceptable Conditions: Specimen types other than CSF. Contaminated, heat-inactivated, or hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: 8 hours; Refrigerated: 2 weeks; Frozen: 1 year

New Test
Available Now

3000477 **Hypersensitivity Pneumonitis Panel** **HYPER PAN**

Methodology: Qualitative Immunodiffusion
Performed: Sun-Sat
Reported: 3-5 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: 0.15 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Plasma.
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
	A. fumigatus #1 Ab, Precipitin	None detected
	A. fumigatus #6 Ab, Precipitin	None detected
	A. pullulans Ab, Precipitin	None detected
	Pigeon Serum, Ab, Precipitin	None detected
	M. faeni Ab, Precipitin	None detected
	T. vulgaris #1 Ab Precipitin	None detected
	A. flavus Ab, Precipitin	None detected
	A. fumigatus #2 Ab, Precipitin	None detected
	A. fumigatus #3 Ab, Precipitin	None detected
	S. viridis Ab, Precipitin	None detected
	T. candidus Ab, Precipitin	None detected
	T. sacchari Ab, Precipitin	None detected

Note: Testing includes antibodies directed at *Aspergillus fumigatus* #1, *Aspergillus fumigatus* #6, *Aureobasidium pullulans*, *Pigeon Serum*, *Micropolyspora faeni*, *Thermoactinomyces vulgaris* #1, *Aspergillus flavus*, *Aspergillus fumigatus* #2, *Aspergillus fumigatus* #3, *Saccharomonospora viridis*, *Thermoactinomyces candidus* and *Thermoactinomyces sacchari.*

CPT Code(s): 86331 x7; 86606 x5

New York DOH Approved.

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

New Test Available Now | **3000539** | **Imatinib** | **IMATINIB**

Methodology: Immunoturbidimetry
Performed: Tue, Fri
Reported: 1-5 days

Specimen Required: Patient Prep: Prior to testing patient should have had uninterrupted imatinib therapy for at least 29 days with no change in dose or treatment for at least 8 days. Blood draw should be performed immediately prior to the next scheduled dose.
Collect: Plasma, Pre-dose (Trough) Draw - At a Steady State Concentration, in K_2EDTA (Lavender or Pink) or Lithium Heparin (Green)
Specimen Preparation: Separate from cells within 48 hours of collection. Centrifuge the whole blood for a minimum of 10 minutes to separate the plasma from cells. Carefully draw off the plasma starting from the top of the plasma layer, avoiding the cell layer (contamination of plasma with blood cells may interfere with results). Transfer 1 mL plasma to an ARUP Standard Transport Tube. (Min: 0.5 mL)
Storage/Transport Temperature: Refrigerated
Unacceptable Conditions: Whole blood, gel separator tubes, light blue (citrate), or yellow top tubes.
Stability (collection to initiation of testing): Ambient: 7 days; Refrigerated: 30 days; Frozen: 30 days

Reference Interval: 500-1999 ng/mL

Interpretive Data: The therapeutic range is based on plasma pre-dose (trough) draw at steady-state concentration. Concentrations above 1000 ng/mL in chronic myelogenous leukemia (CML) patients, and above 1100 ng/mL in gastrointestinal stromal tumor (GIST) patients are statistically associated with an improved response.

CPT Code(s): 80299

New York DOH approval pending. Call for status update.

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

2008320 | **Infliximab and Infliximab-dyyb Activity and Neutralizing Antibody** | **IFX NAB**

CPT Code(s): 80299; 82397

2013612 | **Infliximab and Infliximab-dyyb with Reflex to Antibody** | **IFX DL R**

CPT Code(s): 80299, if reflexed add 82397

New Test **3000599** **Kidney Profile** **KID PRO**

Methodology: Quantitative Immunoturbidimetry/Quantitative Enzymatic/Quantitative Spectrophotometry
Performed: Sun-Sat
Reported: Within 24 hours

Specimen Required: Collect: Plasma Separator Tube (PST) or Serum Separator Tube (SST) **AND** random urine. Also acceptable: 24 hour urine.
Specimen Preparation Allow serum tube to clot completely at room temperature. Separate from cells ASAP or within 2 hours. Transfer 1 mL serum or plasma to an ARUP Standard Transport Tube. (Min: 0.2 mL) **AND** Transfer one 3 mL aliquot of urine to an ARUP Standard Transport Tube. (Min: 0.5 mL) Also acceptable: Urine specimens previously preserved with 6M HCl, boric acid, or 5 percent NaOH.
Storage/Transport Temperature: Refrigerated.
Remarks: Patient age and sex are required for calculation.
Unacceptable Conditions: Specimens obtained through catheters, used to infuse hyperalimentation fluid. Specimens with potassium oxalate/sodium fluoride, citrate, or EDTA as anticoagulants.
Stability (collection to initiation of testing): Ambient: 48 hours; Refrigerated: 1 week; Frozen: 3 months

Reference Interval: By report

Interpretive Data: The CKD-EPI equation for non-African American individuals is used to calculate the estimated glomerular filtration rate (GFR). To estimate the GFR for African Americans, multiply the provided GFR result by 1.16.

The CKD-EPI equation is validated in individuals 18 years of age and older. However, the equation is less accurate in patients with extremes of muscle mass, restriction of dietary protein, ingestion of creatine, extra-renal metabolism of creatinine, or treatment with medications that affect renal tubular creatinine secretion.

GFR Categories in Chronic Kidney Disease (CKD)

GFR Category	GFR (mL/min/1.73 square meters)	Terms
G1	Greater than or equal to 90	Normal or high*
G2	60-89	Mildly decreased*
G3a	45-59	Mildly to moderately decreased
G3b	30-44	Moderately to severely decreased
G4	15-29	Severely decreased
G5	Less than 15	Kidney failure
*In the absence of evidence of kidney damage, neither GFR category G1 nor G2 fulfill the criteria for CKD (Kidney Int Suppl 2013;3:1-150)		

Note: If a 24-hour urine collection is submitted, 24-hour calculations will not be performed. If 24-hour calculations are required, refer to test code 0050203 Albumin-Creatinine Ratio, Urine.

CPT Code(s): 82043, 82570, 82565

New York DOH approval pending. Call for status update.

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

0020516 **Lactic Acid, CSF** **LA-CF**

Specimen Required: Collect: CSF. Collect on ice.
Specimen Preparation: Centrifuge and transport 0.5 mL supernatant. (Min: 0.2 mL)
Storage/Transport Temperature: Frozen. Separate specimens must be submitted when multiple tests are ordered.
Stability (collection to initiation of testing): After separation from cellular material: Ambient: Unacceptable; Refrigerated: 2 weeks; Frozen: 1 month

0051726 ***Leishmania* Antibody, IgG (Visceral Leishmaniasis)** **LEISH IGG**

Methodology: Qualitative Immunoassay

Reference Interval:
Effective August 20, 2018
Negative

2013716 **LipoFit by NMR** **NMRLIPFIT**

Specimen Required: Patient Prep: Fast 12 hours prior to collection.
Collect: Greiner Bio-One Clot Activator Tube (ARUP supply #53483) available online through eSupply using ARUP Connect ™ or by contacting ARUP Client Services at (800) 522-2787. Also acceptable: Plain Red.
Specimen Preparation: Gently invert tube to mix contents; allow to clot at room temperature. Separate from cells within 8 hours. Transfer 4 mL serum to an ARUP Standard Transport Tube. (Min: 2 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Plasma. Serum separator tubes other than Greiner Bio-One. Non-fasting or lipemic specimens.
Stability (collection to initiation of testing): Ambient: 24 hours; Refrigerated: 1 week; Frozen: Unacceptable

2013715 **LipoFit by NMR, Particle Count Only** **NMRLIPFITP**

Specimen Required: Patient Prep: Fast 12 hours prior to collection.
Collect: Greiner Bio-One Clot Activator Tube (ARUP supply #53483). Available online through eSupply using ARUP Connect ™ or by contacting ARUP Client Services at (800) 522-2787. Also acceptable: Plain red.
Specimen Preparation: Gently invert tube to mix contents and allow to clot at room temperature. Separate serum from cells within 8 hours. Transfer 2 mL serum to an ARUP Standard Transport Tube. (Min: 1 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Plasma. Serum separator tubes other than Greiner Bio-One. Non-fasting or lipemic specimens.
Stability (collection to initiation of testing): Ambient: 2 days; Refrigerated: 1 month; Frozen: Unacceptable

0054441 **Measles (Rubeola) Antibody, IgM, CSF** **MEASLMCSF**

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 0.5 mL CSF to an ARUP Standard Transport Tube. (Min: 0.2 mL)
Storage/Transport Temperature: Refrigerated. Also acceptable: Frozen.
Unacceptable Conditions: Specimen types other than CSF. Contaminated, heat-inactivated, or hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: 8 hours; Refrigerated: 2 weeks; Frozen: 1 year

0054443 **Mumps Virus Antibody IgM, CSF** **MUMPSMCSF**

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 0.5 mL CSF to an ARUP Standard Transport Tube. (Min: 0.2 mL)
Storage/Transport Temperature: Refrigerated. Also acceptable: Frozen.
Unacceptable Conditions: Specimen types other than CSF. Contaminated, heat-inactivated, or hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: 8 hours; Refrigerated: 2 weeks; Frozen: 1 year

New Test **3000523** **Mumps Virus by PCR** **MPSPCR**

Methodology: Qualitative Polymerase Chain Reaction
Performed: Mon, Wed, Fri, Sat
Reported: 1-4 days

Specimen Required: Patient Prep: Patient should not eat, drink, smoke or chew gum for 30 minutes before collecting oral sample.
Collect: Buccal swab.
Specimen Preparation: Transfer buccal swab to viral transport media (ARUP supply #12884) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787. (Min: 0.5 mL)
Storage/Transport Temperature: Frozen.
Remarks: Specimen source required.
Stability (collection to initiation of testing): Ambient: 48 hours; Refrigerated: 1 week; Frozen: 1 week

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

CPT Code(s): 87798

New York DOH approval pending. Call for status update.

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

2007190 **Occult Blood, Fecal by Immunoassay** **FOB IA**

HOTLINE NOTE: There is a component change associated with this test.
Remove component 2007191, Occult Blood, Fecal Immunoassay

3000197 **PD-L1 22C3 IHC for Gastric/GEJ with Interpretation, pembrolizumab (KEYTRUDA)** **22C3 GAST**

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 recommended but not required), available online through eSupply using ARUP Connector 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: Include surgical pathology report and indicate tissue site with the test order. 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. Specimens with fewer than 100 viable tumor cells. Lung specimens.
Stability (collection to initiation of testing): **Slides:** Ambient: 5 months (Must be stored in the dark); Refrigerated: 5 months (Must be stored in the dark); Frozen: Unacceptable
Paraffin Block: Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

2013284 **PD-L1 22C3 IHC for NSCLC by Immunohistochemistry with Interpretation, pembrolizumab (KEYTRUDA)** **22C3 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 recommended but not required), available online through eSupply using ARUP Connector 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: Include surgical pathology report and indicate tissue site with the test order. For additional technical details, please contact ARUP Client Services at (800) 522-2787.
Unacceptable Conditions: Gastric/GEJ specimens. Paraffin block with no tumor tissue remaining. Specimens fixed in any fixative other than 10 percent neutral buffered formalin. Decalcified specimens. Specimens with fewer than 100 viable tumor cells.
Stability (collection to initiation of testing): **Slides:** Ambient: 6 months (Must be stored in the dark); Refrigerated: 6 months (Must be stored in the dark); Frozen: Unacceptable
Paraffin Block: Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

2013025 **Perampanel Quantitative, Serum or Plasma** **PERAMP**

Performed: Varies
Reported: 3-10 days

2012130 **Phosphatidylethanol (PEth)** **PHOS PHAT**

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

0051622 **Phosphatidylethanolamine Antibodies, IgG, IgM and IgA** **PHOSETHPAN**

Performed: Tue
Reported: 1-8 days

0051601 **Phosphatidylethanolamine Antibody, IgA** **PHOSETH A**

Performed: Tue
Reported: 1-8 days

0051602 **Phosphatidylethanolamine Antibody, IgG** **PHOSETH G**

Performed: Tue
Reported: 1-8 days

0051603 **Phosphatidylethanolamine Antibody, IgM** **PHOSETH M**

Performed: Tue
Reported: 1-8 days

New Test Available Now **3000400** **QuantiFERON-TB Gold Plus, 1-Tube** **QFT-PLUS**

Methodology: Cell Culture/Semi-Quantitative Enzyme-Linked Immunosorbent Assay
Performed: Sun-Sat
Reported: 1-2 days

Specimen Required: Collect: QuantiFERON-TB Gold Plus 1-tube (ARUP Supply #54015) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787. For collection and transport instructions refer to QuantiFERON under Special Handling at https://aruplab.com/testing/specimen/quantiferon.
Specimen Preparation: Specimen must remain ambient for a minimum of 15 minutes after collection before being refrigerated. Transport 5 mL whole blood. (Min: 5 mL)
Storage/Transport Temperature: Refrigerated.
Stability (collection to initiation of testing): Ambient: 3 hours; Refrigerated: 48 hours; Frozen: Unacceptable

Reference Interval:

Components	Reference Interval
QuantiFERON-TB Gold In-Tube	Negative
QuantiFERON-TB1 minus NIL	0.34 IU/mL or less
QuantiFERON-TB2 minus NIL	0.34 IU/mL or less
QuantiFERON MITOGEN minus NIL	No reference interval
QuantiFERON NIL	No reference interval

Interpretive Data: Interferon gamma release is measured for specimens from each of the four collection tubes. A qualitative result (Negative, Positive, or Indeterminate) is based on interpretation of the four values, NIL, MITOGEN minus NIL (MITOGEN-NIL), TB1 minus NIL (TB1-NIL), and TB2 minus NIL (TB2-NIL). The NIL value represents nonspecific reactivity produced by the patient specimen. The MITOGEN-NIL value serves as the positive control for the patient specimen, demonstrating successful lymphocyte activity. The TB1-NIL tube specifically detects CD4+ lymphocyte reactivity, specifically stimulated by the TB1 antigens. The TB2-NIL tube detects both CD4+ and CD8+ lymphocyte reactivity, stimulated by TB2 antigens. An overall Negative result does not completely rule out TB infection.

A false-positive result in the absence of other clinical evidence of TB infection is not uncommon. Refer to: Updated Guidelines for Using Interferon Gamma Release Assays to Detect Mycobacterium tuberculosis Infection --- United States, 2010 (http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5905a1.htm), for more information concerning test performance in low-prevalence populations and use in occupational screening.

Note: If the stability requirements cannot be met, please refer to test 3000399, QuantiFERON-TB Gold Plus, 4-Tube.

CPT Code(s): 86480

New York DOH Approved.

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

New Test Available Now | **3000399** | **QuantiFERON-TB Gold Plus, 4-Tube** | **QFT-4**

Methodology: Cell Culture/Semi-Quantitative Enzyme-Linked Immunosorbent Assay
Performed: Sun-Sat
Reported: 1-2 days

Specimen Required: Collect: QuantiFERON-TB Gold Plus (Standard) 4-Tube Collection Kit (ARUP Supply #54012) or QuantiFERON-TB Gold Plus (HIGH ALTITUDE) 4-Tube Collection Kit (ARUP Supply #54010) available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787. Specimens may remain ambient for up to 16 hours after collection before being placed in an incubator. For collection and transport instructions refer to QuantiFERON under Special Handling at https://aruplab.com/testing/specimen/quantiferon.
Specimen Preparation: Transport plasma in the original containers. (Min: 0.8 mL per container)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Whole blood.
Stability (collection to initiation of testing): Ambient: 2 hours; Refrigerated: 1 month; Frozen: Unacceptable

Reference Interval:

Components	Reference Interval
QuantiFERON-TB Gold In-Tube	Negative
QuantiFERON-TB1 minus NIL	0.34 IU/mL or less
QuantiFERON-TB2 minus NIL	0.34 IU/mL or less
QuantiFERON MITOGEN minus NIL	No reference interval
QuantiFERON NIL	No reference interval

Interpretive Data: Interferon gamma release is measured for specimens from each of the four collection tubes. A qualitative result (Negative, Positive, or Indeterminate) is based on interpretation of the four values, NIL, MITOGEN minus NIL (MITOGEN-NIL), TB1 minus NIL (TB1-NIL), and TB2 minus NIL (TB2-NIL). The NIL value represents nonspecific reactivity produced by the patient specimen. The MITOGEN-NIL value serves as the positive control for the patient specimen, demonstrating successful lymphocyte activity. The TB1-NIL tube specifically detects CD4+ lymphocyte reactivity, specifically stimulated by the TB1 antigens. The TB2-NIL tube detects both CD4+ and CD8+ lymphocyte reactivity, stimulated by TB2 antigens. An overall Negative result does not completely rule out TB infection.

A false-positive result in the absence of other clinical evidence of TB infection is not uncommon. Refer to: Updated Guidelines for Using Interferon Gamma Release Assays to Detect Mycobacterium tuberculosis Infection --- United States, 2010 (http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5905a1.htm), for more information concerning test performance in low-prevalence populations and use in occupational screening.

CPT Code(s): 86480

New York DOH Approved.

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

0050371 | ***Rickettsia rickettsii* (Rocky Mountain Spotted Fever) Antibodies, IgG & IgM by IFA** | **RMSF G/M**

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 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)

0050369 ***Rickettsia rickettsii*** **(Rocky Mountain Spotted Fever) Antibody, IgG** **RMSF G**

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 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)

0050372 ***Rickettsia rickettsii*** **(Rocky Mountain Spotted Fever) Antibody, IgM** **RMSF M**

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 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)

0050384 ***Rickettsia typhi*** **(Typhus Fever) Antibodies, IgG & IgM by IFA** **TYPHU G/M**

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 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)

0050381 ***Rickettsia typhi*** **(Typhus Fever) Antibody, IgG by IFA** **TYPHU G**

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 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)

0050383 *Rickettsia typhi* (Typhus Fever) Antibody, IgM by IFA — TYPHU M

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 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)

0099564 *Strongyloides* Antibody, IgG by ELISA, Serum — STRONGY

Specimen Required: Collect: Serum Separator Tube (SST) or Plain Red.
Specimen Preparation: Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min. 0.3 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Bacterially contaminated, heat-inactivated, hemolyzed, icteric, or lipemic specimens.
Stability (collection to initiation of testing): After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year

Reference Interval:
Effective August 20, 2018

0.9 IV or less	Negative - No significant level of *Strongyloides* IgG antibody detected.
1.0 IV	Equivocal - The *Strongyloides* IgG antibody result is borderline and therefore inconclusive. Recommend retesting the patient in 2-4 weeks, if clinically indicated.
1.1 IV or greater	Positive - IgG antibodies to *Strongyloides* detected, which may suggest current or past infection.

HOTLINE NOTE: There is a numeric map change associated with this test.
Change the numeric map for component 0099564, Strongyloides Antibody, IgG By ELISA from XX.XX to XXX.X.

New Test 3000584 Tapentadol, Free, Serum or Plasma — TAPEN SP

Methodology: Quantitative Liquid Chromatography-Tandem Mass Spectrometry
Performed: Varies
Reported: 4-11 days

Specimen Required: Collect: Plain Red, Lavender (EDTA), 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. (Min: 0.4 mL)
Storage/Transport Temperature: Refrigerated. Also acceptable: Room temperature or frozen.
Unacceptable Conditions: Separator tubes.
Stability (collection to initiation of testing): Ambient: 1 month; Refrigerated: 1 month; Frozen: 1 month

CPT Code(s): 80372 (Alt code: G0480)

New York DOH Approved.

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

0030177 Thrombotic Risk, Inherited Etiologies (Uncommon) THROMUNCOM

Reference Interval:

Test Number	Components	Reference Interval		
0030235	Partial Thromboplastin Time	24-35 seconds		
0030215	Prothrombin Time	12.0-15.5 seconds		
0030113	Protein C, Functional	Effective November 17, 2014		
		Age	**Reference Interval**	
		1-4 days	17-53%	
		5-29 days	20-64%	
		30-89 days	21-65%	
		90-179 days	28-80%	
		180-364 days	37-81%	
		1-6 years	40-92%	
		7-9 years	70-142%	
		10-11 years	68-143%	
		12-13 years	66-162%	
		14-15 years	69-170%	
		16-17 years	70-171%	
		18 years and older	83-168%	
0098894	Protein S Free, Antigen	**Age**	**Male**	**Female**
		1-89 days	15-55%	15-55%
		90-179 days	35-92%	35-92%
		180-364 days	45-115%	45-115%
		1-5 years	62-120%	62-120%
		6-9 years	62-130%	62-130%
		10-17 years	60-140%	60-140%
		18 years and older	74-147%	55-123%
0030010	Antithrombin, Enzymatic (Activity)	**Age**	**Reference Interval**	
		1-4 days	39-87%	
		5-29 days	41-93%	
		30-89 days	48-108%	
		90-179 days	73-121%	
		180-364 days	84-124%	
		1-5 years	82-139%	
		6 years	90-131%	
		7-9 years	90-135%	
		10-11 years	90-134%	
		12-13 years	90-132%	
		14-15 years	90-131%	
		16-17 years	87-131%	
		18 years and older	76-128%	

0051332 UDP Glucuronosyltransferase 1A1 (*UGT1A1*) Genotyping UGT1A1

Performed: Varies
Reported: 2-7 days

0054445 Varicella-Zoster Virus Antibody, IgM by ELISA (CSF) VZMCSF

Specimen Required: Collect: CSF.
Specimen Preparation: Transfer 0.5 mL CSF to an ARUP Standard Transport Tube. (Min: 0.3 mL)
Storage/Transport Temperature: Refrigerated.
Unacceptable Conditions: Specimen types other than CSF. Contaminated, heat-inactivated, or hemolyzed specimens.
Stability (collection to initiation of testing): Ambient: 8 hours; Refrigerated: 2 weeks; Frozen: 1 year

Quarterly HOTLINE: Effective August 20, 2018

The following will be discontinued from ARUP's test menu on August 20, 2018.
Replacement test options are supplied if applicable.

Test Number	Test Name	Refer To Replacement
0091267	Chloral Hydrate Metabolite, Serum or Plasma	
2013277	Esterase, Non-Specific Cytochemical Stain Only	
0092254	Estronex Profile, Urine	
2002685	Hepatitis C Virus (HCV) by Quantitative PCR with Reflex to HCV Genotype by Sequencing	Hepatitis C Virus (HCV) by Quantitative NAAT with Reflex to HCV Genotype by Sequencing (3000576)
2010793	Hepatitis C Virus (HCV) by Quantitative PCR with Reflex to HCV High-Resolution Genotype by Sequencing	Hepatitis C Virus (HCV) by Quantitative NAAT with Reflex to HCV High-Resolution Genotype by Sequencing (3000577)
0098268	Hepatitis C Virus by Quantitative PCR	Hepatitis C Virus (HCV) by Quantitative NAAT (3000572)
0091504	Hydrochlorothiazide Quantitative, Urine	
2014510	Molybdenum Quantitative, Urin	
2009387	Mumps Virus RNA Qualitative, Real-Time PCR	Mumps Virus by PCR (3000523)
2013273	Myeloperoxidase, Cytochemical Stain Only	
2004067	p21 (Waf1/Cip 1) by Immunohistochemistry	
0051729	QuantiFERON-TB Gold In-Tube	QuantiFERON-TB Gold Plus, 1-Tube (3000400)
0049180	Sezary Cell Exam	
2003133	Tapentadol and Metabolite, Serum or Plasma, Quantitative	Tapentadol, Free, Serum or Plasma (3000584)
0049060	Tartrate Resistant Acid Phosphatase Stain	
2013275	Tartrate-Resistant Acid Phosphatase, Cytochemical Stain Only	
0030268	Thrombotic Risk (Acquired) Reflexive Panel	
0091433	Titanium, Urine	
0091112	Tocainide Quantitation, Serum or Plasma	