Hotline Table of Contents

Effective as of 08/03/2026

Additional ordering and billing information

Information when ordering laboratory tests that are billed to Medicare/Medicaid

Information regarding Current Procedural Terminology (CPT)

Test Number	Mnemonic	Test Name	New Test	Test Name Change	Specimen Requirements	Methodology	Note	Interpretive Data	Reference Interval	Component Charting Name	Component Change	Reflex Pattern	Result Type	Ask at Order Prompt	Numeric Map	Unit of Measure	CPT Code	Pricing Change	Inactivation w/ Replacement	Inactivation w/o Replacement
0051408	CYT TH1 SE	Cytokine Panel, TH1, Serum			x				x											
0051518	CYT TH2 SE	Cytokine Panel, TH2, Serum			x				x											
0051524	CYT MON SE	Cytokine Panel, Monokines, Serum			x				x											
0051529	IL2R DO	Interleukin 2 Receptor, Soluble, Serum			x				x											
0051530	IL12 DO	Interleukin 12, Serum			x				x											
0051531	IFNG DO	Interferon gamma, Serum			x				x											
0051534	IL10 DO	Interleukin 10, Serum			x				x											
0051535	IL13 DO	Interleukin 13, Serum			x				x											
0051536	IL1B DO	Interleukin 1 beta, Serum			x				x											
0051539	TNFA DO	Tumor Necrosis Factor - alpha, Serum			x				x											
0060843	ML NAF	Antibiotic Level, Nafcillin																		x
0091161	GHB U	Gamma-Hydroxybutyric Acid (GHB), Urine - Screen with Reflex to Confirmation/Quantitation			x												x			

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0091193	GHB SP	Gamma-Hydroxybutyric Acid (GHB), Serum or Plasma - Screen with Reflex to Confirmation/Quantitation			x												x			
0091551	PHENOBAR	Phenobarbital, Total/Unbound/Bound, Serum or Plasma		x	x					x										
2001913	GEL PORC	Allergen, Food, Gelatin Porcine IgE			x															
2006328	GLUT TOT	Glutathione Total			x															
2012010	SKEL FE	Skeletal Dysplasia Panel, Sequencing and Deletion/Duplication, Fetal			x															
2013014	MITOT SP	Mitotane, Serum or Plasma			x												x			
2013115	IL17	Interleukin 17, Serum			x				x											
2013230	PCB PAN	Polychlorinated Biphenyls (PCB) Panel, Congeners, Serum or Plasma			x		x													
3000508	SYN CAN U	Synthetic Cannabinoid Metabolites, Qualitative, Urine			x												x			

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3001648	GBA FGS	Gaucher Disease (GBA) Sequencing			x															
3003723	PROPOX SP	Propoxyphene and Metabolite, Serum or Plasma			x					x							x			
3003913	ORTHO PAN	Orthopedic Metals Panel (Chromium, Cobalt, Titanium), Body Fluid			x															
3021015	VIT B3	Vitamin B3 (Niacin and Metabolites), Serum/Plasma			x															
3021236	LINEZOLID	Antibiotic Level, Linezolid	x																	

TEST CHANGES

Cytokine Panel, TH1, Serum

0051408, CYT TH1 SE

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube, or plain red.
Specimen Preparation:	CRITICAL FROZEN: Separate serum from cells ~~ASAP or~~ within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Freeze serum within 30 minutes.
Transport Temperature:	CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.
Unacceptable Conditions:	Refrigerated specimens. Contaminated or heat-inactivated specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year
Methodology:	Quantitative Multiplex Bead Assay
Note:	Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.
CPT Codes:	83520 x4
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.

Reference Interval:

Test Number	Components	Reference Interval
	Interferon gamma, Serum	~~4.2~~5.8 pg/mL or less
	Interleukin 12, Serum	2.6 pg/mL or less
	Interleukin 2 Receptor, Soluble, Serum	~~175.3-858.2~~ 353.5 - 1019.8 pg/mL
	Interleukin 2, Serum	2.1 pg/mL or less

TEST CHANGE

Cytokine Panel, TH2, Serum

0051518, CYT TH2 SE

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube, or plain red.
Specimen Preparation:	CRITICAL FROZEN: Separate serum from cells ~~ASAP or~~ within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Freeze serum within 30 minutes.
Transport Temperature:	CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.
Unacceptable Conditions:	Refrigerated specimens. Contaminated or heat-inactivated specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year
Methodology:	Quantitative Multiplex Bead Assay
Note:	Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.
CPT Codes:	83520 x4
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.

Reference Interval:

Test Number	Components	Reference Interval
	Interleukin 10, Serum	~~2.8~~6.0 pg/mL or less
	Interleukin 13, Serum	~~2.3~~7.8 pg/mL or less
	Interleukin 4, Serum	2.2 pg/mL or less
	Interleukin 5, Serum	2.1 pg/mL or less

TEST CHANGE

Cytokine Panel, Monokines, Serum

0051524, CYT MON SE

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube, or plain red.
Specimen Preparation:	CRITICAL FROZEN: Separate serum from cells ~~ASAP or~~ within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Freeze serum within 30 minutes.
Transport Temperature:	CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.
Unacceptable Conditions:	Refrigerated specimens. Contaminated or heat-inactivated specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year
Methodology:	Quantitative Multiplex Bead Assay
Note:	Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.
CPT Codes:	83520 x3; 83529
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.

Reference Interval:

Test Number	Components	Reference Interval
	Interleukin 1 beta, Serum	~~6.~~7.1 pg/mL or less
	Interleukin 6, Serum	2.0 pg/mL or less
	Interleukin 8, Serum	3.0 pg/mL or less
	Tumor Necrosis Factor - alpha, Serum	~~7.2~~11.5 pg/mL or less

TEST CHANGE

Interleukin 2 Receptor, Soluble, Serum

0051529, IL2R DO

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube, or plain red.
Specimen Preparation:	CRITICAL FROZEN: Separate serum from cells ~~ASAP or~~ within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Freeze serum within 30 minutes.
Transport Temperature:	CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.
Unacceptable Conditions:	Refrigerated specimens. Contaminated or heat-inactivated specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year
Methodology:	Quantitative Multiplex Bead Assay
Note:	Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.
CPT Codes:	83520
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.	

Reference Interval:

Test Number	Components	Reference Interval
	Interleukin 2 Receptor, Soluble, Serum	~~175.3 - 858.2~~353.5 - 1019.8 pg/mL

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Effective Date: August 3, 2026

TEST CHANGE

Interleukin 12, Serum

0051530, IL12 DO

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube, or plain red.
Specimen Preparation:	CRITICAL FROZEN: Separate serum from cells ~~ASAP or~~ within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Freeze serum within 30 minutes.
Transport Temperature:	CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.
Unacceptable Conditions:	Refrigerated specimens. Contaminated or heat-inactivated specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year
Methodology:	Quantitative Multiplex Bead Assay
Note:	Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.
CPT Codes:	83520
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.

Reference Interval:

~~Effective May 18, 2020~~ ~~1.9 pg/mL or less~~Test Number	Components	Reference Interval
	Interleukin 12, Serum	2.6 pg/mL or less

Deleted Cells

Deleted Cells

TEST CHANGE

Interferon gamma, Serum

0051531, IFNG DO

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube, or plain red.
Specimen Preparation:	CRITICAL FROZEN: Separate serum from cells ~~ASAP or~~ within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Freeze serum within 30 minutes.
Transport Temperature:	CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.
Unacceptable Conditions:	Refrigerated specimens. Contaminated or heat-inactivated specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year
Methodology:	Quantitative Multiplex Bead Assay
Note:	Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.
CPT Codes:	83520
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.

Reference Interval:

Test Number	Components	Reference Interval
	Interferon gamma, Serum	~~4.2~~5.8 pg/mL or less

TEST CHANGE

Interleukin 10, Serum

0051534, IL10 DO

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube, or plain red.
Specimen Preparation:	CRITICAL FROZEN: Separate serum from cells ~~ASAP or~~ within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Freeze serum within 30 minutes.
Transport Temperature:	CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.
Unacceptable Conditions:	Refrigerated specimens. Contaminated or heat-inactivated specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year
Methodology:	Quantitative Multiplex Bead Assay
Note:	Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.
CPT Codes:	83520
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.

Reference Interval:

Test Number	Components	Reference Interval
	Interleukin 10, Serum	~~2.8~~6.0 pg/mL or less

TEST CHANGE

Interleukin 13, Serum

0051535, IL13 DO

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube, or plain red.
Specimen Preparation:	CRITICAL FROZEN: Separate serum from cells ~~ASAP or~~ within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Freeze serum within 30 minutes.
Transport Temperature:	CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.
Unacceptable Conditions:	Refrigerated specimens. Contaminated or heat-inactivated specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year
Methodology:	Quantitative Multiplex Bead Assay
Note:	Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.
CPT Codes:	83520
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.

Reference Interval:

Test Number	Components	Reference Interval
	Interleukin 13, Serum	~~2.3~~7.8 pg/mL or less

TEST CHANGE

Interleukin 1 beta, Serum

0051536, IL1B DO

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube (SST), or plain red.
Specimen Preparation:	CRITICAL FROZEN: Separate serum from cells ~~ASAP or~~ within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Freeze serum within 30 minutes.
Transport Temperature:	CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.
Unacceptable Conditions:	Refrigerated specimens. Contaminated or heat-inactivated specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year
Methodology:	Quantitative Multiplex Bead Assay
Note:	Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.
CPT Codes:	83520
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.

Reference Interval:

Test Number	Components	Reference Interval
	Interleukin 1 beta, Serum	~~6.~~7.1 pg/mL or less

TEST CHANGE

Tumor Necrosis Factor - alpha, Serum

0051539, TNFA DO

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube, or plain red.
Specimen Preparation:	CRITICAL FROZEN: Separate serum from cells ~~ASAP or~~ within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Freeze serum within 30 minutes.
Transport Temperature:	CRITICAL FROZEN. Additional specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.
Unacceptable Conditions:	Refrigerated specimens. Contaminated or heat-inactivated specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year
Methodology:	Quantitative Multiplex Bead Assay
Note:	Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.
CPT Codes:	83520
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.	

Reference Interval:

Test Number	Components	Reference Interval
	Tumor Necrosis Factor - alpha, Serum	~~7.2~~11.5 pg/mL or less

TEST CHANGE

Gamma-Hydroxybutyric Acid (GHB), Urine - Screen with Reflex to Confirmation/Quantitation

0091161, GHB U

Specimen Requirements:	
Patient Preparation:	
Collect:	~~Random urine~~Urine.
Specimen Preparation:	Transfer ~~5~~2 mL urine to an ARUP ~~Standard Transport Tubes.~~standard transport tube. (Min: ~~2.8~~0.9 mL) Test is not performed at ARUP; separate specimens must be submitted when multiple tests are ordered.
Transport Temperature:	~~Refrigerated~~Frozen. Also acceptable: Room temperature or ~~frozen~~refrigerated.
Unacceptable Conditions:	
Remarks:	
Stability:	Ambient: -1 week; Refrigerated: 1 week; Frozen: 3 weeks
Methodology:	Gas Chromatography-Tandem Mass Spectrometry
Note:	If ~~Gamma-Hydroxybutyric Acid Screen~~gamma-hydroxybutyric acid is detected, then confirmation testing will be added at no additional charge.
CPT Codes:	80307; if positive add ~~80375 (Alt code: if positive add G0480)~~82542, 82570.
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Reference Interval:

~~By~~Refer to report

TEST CHANGE

Gamma-Hydroxybutyric Acid (GHB), Serum or Plasma - Screen with Reflex to Confirmation/Quantitation

0091193, GHB SP

Specimen Requirements:	
Patient Preparation:	
Collect:	Plain red, lavender (EDTA), or pink (K2EDTA).
Specimen Preparation:	Separate from cells ASAP or within 2 hours of collection. Transfer ~~5~~1 mL serum or plasma to an ARUP standard transport ~~tubes~~tube. (Min: ~~2.4~~0.5 mL) Test is not performed at ARUP; separate specimens must be submitted when multiple tests are ordered.
Transport Temperature:	Refrigerated. Also acceptable: Room temperature or frozen.
Unacceptable Conditions:	Polymer gel separation tube (SST or PST) or citrate buffered tubes.
Remarks:	
Stability:	Ambient: 1 month; Refrigerated: 1 month; Frozen: 2 months
Methodology:	Gas Chromatography-Tandem Mass Spectrometry ~~(GC-MS)~~
Note:	
CPT Codes:	80307; if positive add ~~8392~~82542
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Reference Interval:

Refer to report

TEST CHANGE

Phenobarbital, Total/Unbound/Bound, ~~S/P~~Serum or Plasma

0091551, PHENOBAR

Specimen Requirements:	
Patient Preparation:	
Collect:	Plain ~~Red, Lavender~~red, lavender (K2EDTA), or ~~Pink~~pink (K2EDTA).
Specimen Preparation:	Separate from cells ASAP or within 2 hours of collection. Transfer 2 mL serum or plasma to an ARUP ~~Standard Transport Tube~~standard transport tube. (Min: 0.9 mL) Test is not performed at ARUP; separate specimens must be submitted when multiple tests are ordered.
Transport Temperature:	Refrigerated. Also acceptable: Room temperature or frozen.
Unacceptable Conditions:	~~Separator tubes.~~Polymer gel separation tube (SST or PST).
Remarks:	
Stability:	Ambient: 3 months; Refrigerated: 3 months; Frozen: 18 months
Methodology:	Qualitative High Performance Liquid Chromatography-Tandem Mass Spectrometry
Note:	
CPT Codes:	80184 x2
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Reference Interval:

~~By~~Refer to report

TEST CHANGE

Allergen, Food, Gelatin Porcine IgE

2001913, GEL PORC

Specimen Requirements:	
Patient Preparation:	
Collect:	Plain red or serum separator tube~~.~~ (SST).
Specimen Preparation:	Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum plus 0.1 mL for each additional allergen ordered to an ARUP ~~Standard Transport Tube.~~standard transport tube. (Min: 0.34 mL plus 0.04 mL for each allergen ordered) Test is not performed at ARUP; separate specimens must be submitted when multiple tests are ordered.
Transport Temperature:	~~Room temperature.~~ Frozen. Also acceptable: ~~Refrigerated~~Room temperature or ~~frozen~~refrigerated.
Unacceptable Conditions:	~~Hemolyzed, icteric, or lipemic specimens.~~
Remarks:	
Stability:	Ambient: 1 month; Refrigerated: 1 month; Frozen: 1 year
Methodology:	Quantitative Enzyme Immunoassay (EIA)
Note:	
CPT Codes:	86003
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Reference Interval:

Refer to report

TEST CHANGE

Glutathione Total

2006328, GLUT TOT

Specimen Requirements:	
Patient Preparation:	
Collect:	Yellow (ACD solution ~~B) (ARUP supply #49658~~A) or yellow (ACD solution ~~A~~B) (ARUP supply #49658). Available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at 800-522-2787.
Specimen Preparation:	Transport whole blood in original collection container. ~~ACD solution B: 10 mL (Min: 8.5) or~~ ACD solution A: 8.5 mL (Min: 4.2 mL) or ACD solution B: 6~~.5~~ mL (Min: 3 mL) or ~~transfer~~ Transfer 1 mL aliquot whole blood from a fully drawn tube to an ARUP standard transport tube with documentation of original collection tube (Min: 1 mL). Test is not performed at ARUP; separate specimens must be submitted when multiple tests are ordered.
Transport Temperature:	Critical refrigerated
Unacceptable Conditions:	
Remarks:	Collection tube must be filled greater than 50% of total volume.
Stability:	Ambient: Unacceptable; Refrigerated: 3 weeks; Frozen: Unacceptable
Methodology:	Quantitative Kinetic Assay
Note:	
CPT Codes:	82978
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Reference Interval:

Refer to report

TEST CHANGE

Skeletal Dysplasia Panel, Sequencing and Deletion/Duplication, Fetal

2012010, SKEL FE

Specimen Requirements:	
Patient Preparation:	
Collect:	Fetal Specimen: Cultured amniocytes OR cultured chorionic villi. Maternal Specimen: Refer to Maternal Cell Contamination, Maternal Specimen (0050608) for maternal specimen requirements.
Specimen Preparation:	Cultured Amniocytes or Cultured CVS: Fill flasks with culture media. Transport two T-25 flasks of 90 percent confluent cultured amniocytes or two T-25 flasks of 90% cultured chorionic villi sampling (CVS). This assay is not performed on direct amniotic fluid or direct chorionic villi specimens. Clients submitting direct amniotic fluid and direct chorionic villi must add Cell Culture for Genetic Testing (3020627) to the initial order. If ARUP receives cultured specimens below the minimum confluence, Cell Culture for Genetic Testing (3020627) will be added by ARUP for an additional fee. The client is responsible for maintaining backup cultures.
Transport Temperature:	Cultured Amniocytes or Cultured CVS: CRITICAL ROOM TEMPERATURE. Must be received within 48 hours of shipment due to viability of cells.
Unacceptable Conditions:	
Remarks:	Patient history forms and informed consent documents are available by selecting the links above or by contacting ARUP Client Services. Counseling and informed consent are recommended for genetic testing. New York Clients: Informed consent is required with specimen submission.
Stability:	Cultured Amniocytes or Cultured CVS: Room temperature: 48 hours; Refrigerated: Unacceptable; Frozen: Unacceptable. New York State Clients: Specimens must be received at performing laboratory within 24 hours of shipping. Older specimens will be evaluated by performing laboratory for acceptability. For specimen requirements and direct submission instructions please contact ARUP Referral Testing at 800-242-2787 ext. 5161.
Methodology:	Massively Parallel Sequencing

TEST CHANGE

Note:	Genes Tested: *AGPS*; *ALPL*; *ARSL*; *CANT1*; *CCN6*; *CILK1*; *COL1A1*; *COL1A2**; *COL2A1*; *COL10A1*; *COL11A1*; *COL11A2*; *COMP*; *CRTAP*; *DDR2*; *DLL3*; *DYM**; *DYNC2H1*; *EBP*; *EVC*; *EVC2*; *FGFR1**; *FGFR2*; *FGFR3*; *FKBP10*; *FLNA*; *FLNB*; *GDF5*; *GNPAT*; *HSPG2*; *IFT80*; *INPPL1*; *LBR*; *LIFR*; *NEK1**; *NPR2*; *P3H1*; *PCNT*; *PEX7*; *POR**; *PPIB*; *PTH1R*; *RUNX2*; *SERPINH1*; *SLC26A2*; *SLC35D1*; *SMARCAL1*; *SOX9*; *TRIP11*; *TRPV4*; *TTC21B*; *WDR19*; *WDR35* *One or more exons are not covered by sequencing and/or deletion/duplication analysis for the indicated gene; see Additional Technical Information.
CPT Codes:	81405; 81408; 81479; 81265
New York DOH Approval Status:	Specimens from New York clients will be sent out to a New York DOH approved laboratory, if possible.

Interpretive Data:

Refer to report.

Reference Interval:

Refer to report

TEST CHANGE

Mitotane, Serum or Plasma

2013014, MITOT SP

Specimen Requirements:	
Patient Preparation:	
Collect:	Plain ~~Red, Lavender~~red, lavender (K2EDTA), or ~~Pink~~pink (K2EDTA).
Specimen Preparation:	Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL serum or plasma to an ARUP ~~Standard Transport Tube~~standard transport tube. (Min: 0.3 mL) Test is not performed at ARUP; separate specimens must be submitted when multiple tests are ordered.
Transport Temperature:	~~Refrigerated~~Frozen. Also acceptable: Room temperature or ~~frozen~~refrigerated.
Unacceptable Conditions:	~~Separator tubes.~~Polymer gel separation tube (SST or PST)
Remarks:	
Stability:	Ambient: 2 weeks; Refrigerated: 2 weeks; Frozen: 28 days
Methodology:	Quantitative Gas Chromatography
Note:	
CPT Codes:	80375 ~~(Alt code: G0480)~~
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Reference Interval:

~~By~~Refer to report

TEST CHANGE

Interleukin 17, Serum

2013115, IL17

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum Separator Tube (SST), or Plain Red.
Specimen Preparation:	CRITICAL FROZEN: Separate serum from cells ~~ASAP or~~ within 2 hours of collection. Transfer 1 mL serum to an ARUP Standard Transport Tube. (Min: 0.4 mL) Freeze serum within 30 minutes.
Transport Temperature:	CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Ship in an ARUP Standard Transport Tube.
Unacceptable Conditions:	Contaminated or heat-inactivated specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 30 minutes; Refrigerated: Unacceptable; Frozen: 1 year
Methodology:	Quantitative Multiplex Bead Assay
Note:	Cytokine levels may demonstrate diurnal variation. For longitudinal comparison, it is recommended that cytokine levels be determined at the same time of day.
CPT Codes:	83520
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Results are used to understand the pathophysiology of immune, infectious, or inflammatory disorders, or may be used for research purposes.	
Reference Interval:	

Test Number	Components	Reference Interval
	Interleukin 17, Serum	2.1~~.4~~ pg/mL or less

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Effective Date: August 3, 2026

TEST CHANGE

Polychlorinated Biphenyls (PCB) Panel, Congeners, Serum or Plasma

2013230, PCB PAN

Specimen Requirements:	
Patient Preparation:	
Collect:	Plain ~~Red, Lavender (K2 EDTA)~~red, lavender (K2EDTA), or ~~Pink (K2 EDTA~~pink (K2EDTA).
Specimen Preparation:	Separate from cells ASAP or within 2 hours of collection. Transfer 2 mL serum or plasma to an ARUP ~~Standard Transport Tube~~standard transport tube. (Min: 0.7 mL) Test is not performed at ARUP; separate specimens must be submitted when multiple tests are ordered.
Transport Temperature:	~~Refrigerated~~Frozen. Also acceptable: ~~Frozen~~Refrigerated.
Unacceptable Conditions:	~~Separator tubes.~~Polymer gel separation tube (SST or PST).
Remarks:	
Stability:	Ambient: ~~48 hours~~2 days; Refrigerated: 2 weeks; Frozen: 1 year
Methodology:	Quantitative Gas Chromatography-Tandem Mass Spectrometry
Note:	Panel includes: 2,4,4'-Trichlorobiphenyl (PCB 28); 2,2',3,5'-Tetrachlorobiphenyl (PCB 44); 2,2',5,5'-Tetrachlorobiphenyl (PCB 52); 2,3',4,4'-Tetrachlorobiphenyl (PCB 66); 2,4,4',5-Tetrachlorobiphenyl (PCB 74); 2,2',4,5,5'-Pentachlorobiphenyl (PCB 101); 2,3',4,4',5-Pentachlorobiphenyl (PCB 118); 2,2',3,4,4',5'-Hexachlorobiphenyl (PCB 138); 2,2',4,4',5,5'-Hexachlorobiphenyl (PCB 153); 2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156); 2,2',3,4,4',5,5'-Heptachlorobiphenyl (PCB 180). ~~Known Interferences: 2,2',3,4,4',5'-Hexachlorobiphenyl (PCB 138); 2,3,3',4,4',6-Hexachlorobiphenyl (PCB 158); 2,3,3',4',5,6-Hexachlorobiphenyl (PCB 163); 2,3,3',4',5',6-Hexachlorobiphenyl (PCB 164); 2,2',4,5,5'-Pentachlorobiphenyl (PCB 101); 2,2',3,4,6'-Pentachlorobiphenyl (PCB 89); 2,2',5,5'-Tetrachlorobiphenyl (PCB 52); 2,3',5',6-Tetrachlorobiphenyl (PCB 73); 2,3',4,4',5-Pentachlorobiphenyl (PCB 118); 2,3,3',4,5-Pentachlorobiphenyl (PCB 106); 2,3',4,4'-Tetrachlorobiphenyl (PCB 66); 3,3',5,5'-Tetrachlorobiphenyl (PCB 80); 2,4,4',5-Tetrachlorobiphenyl (PCB 74); 2,3,4,5-Tetrachlorobiphenyl (PCB 61).~~
CPT Codes:	82441
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

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Effective Date: August 3, 2026

TEST CHANGE

Reference Interval:

Refer to report

{Hotline notes}

Inserted Cells

TEST CHANGE

Synthetic Cannabinoid Metabolites, Qualitative, Urine

3000508, SYN CAN U

Specimen Requirements:	
Patient Preparation:	
Collect:	~~Random urine~~Urine.
Specimen Preparation:	Transfer 3 mL urine with no additives or preservatives to an ARUP standard transport tube. (Min: 1.2 mL) Test is not performed at ARUP; separate specimens must be submitted when multiple tests are ordered.
Transport Temperature:	Refrigerated. Also acceptable: Room temperature or frozen.
Unacceptable Conditions:	
Remarks:	
Stability:	Ambient: 1 month; Refrigerated: 1 month; Frozen: ~~6 months~~1 month
Methodology:	Qualitative High Performance Liquid Chromatography-Tandem Mass Spectrometry
Note:	Known Interferences: 4-carboxy-AMB-PINACA; 5-fluoro-PIC-ACID (5-~~Fluoro~~fluoro-PB-22 3-carboxyindole); 5-fluoro-PIC-ACID; 5-fluoro-PICA 3,3-dimethylbutanoic acid; FUBINACA 3,3-dimethylbutanoic acid; quetiapine.
CPT Codes:	80352 ~~(Alt code: G0480)~~
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Reference Interval:

~~By~~Refer to report

TEST CHANGE

Gaucher Disease (*GBA*) Sequencing

3001648, GBA FGS

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender (K2 or K3EDTA), pink (K2EDTA), or yellow (ACD solution A or B). New York State Clients: Lavender (EDTA)
Specimen Preparation:	Transport 3 mL whole blood. (Min: 1 mL) New York State Clients: 5 mL (Min: 2 mL)
Transport Temperature:	Refrigerated. ~~New York State Clients: Ambient~~
Unacceptable Conditions:	
Remarks:	
Stability:	Ambient: 1 week; Refrigerated: 1 month; Frozen: Unacceptable New York State Clients: Ambient: ~~4 days~~24 hours; Refrigerated: ~~Unacceptable~~1 week; Frozen: Unacceptable
Methodology:	Polymerase Chain Reaction (PCR) / Sequencing
Note:	When testing cord blood specimens, the presence of maternal cell contamination (MCC) is possible, which may impact result interpretation. If clinically warranted, testing for MCC is available, at a charge, through ARUP Laboratories.
CPT Codes:	81479
New York DOH Approval Status:	Specimens from New York clients will be sent out to a New York DOH approved laboratory, if possible.

Interpretive Data:

Background information for Gaucher Disease (*GBA*) Sequencing:
Characteristics: Gaucher disease (GD) is a lysosomal storage disorder with phenotypes ranging from perinatal lethality to lack of symptoms. There are three GD subtypes. Type 1 GD manifests with bone disease, hepatosplenomegaly, anemia, thrombocytopenia, and lung disease but no central nervous system (CNS) involvement. Type 2 GD exhibits CNS symptoms before age 2 and rapidly progresses, resulting in death by age 4. Type 3 GD presents as early as age 2 with CNS symptoms that slowly progress resulting in death during the third or fourth decade.
Incidence: 1 in 900 Ashkenazi Jewish individuals; approximately 1 in 57,000 to 1 in 75,000 in general population.
Inheritance: Autosomal recessive.
Cause: Two pathogenic *GBA* variants on opposite chromosomes.
Clinical Sensitivity: 99 percent.
Methodology: Long-range PCR followed by bidirectional sequencing of all coding regions and intron-exon boundaries of the *GBA* gene.
Analytical Sensitivity and Specificity: Approximately 99 percent.
Limitations: Diagnostic errors can occur due to rare sequence variations. Regulatory region

TEST CHANGE

variants, deep intronic variants, large deletions/duplications/insertions, gene conversion, and complex gene events may not be detected.

Reference Interval:

Refer to report

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Effective Date: August 3, 2026

TEST CHANGE

Propoxyphene and Metabolite, Serum or Plasma

3003723, PROPOX SP

Specimen Requirements:	
Patient Preparation:	
Collect:	Plain red, ~~Lavender~~lavender (K2EDTA or K3EDTA~~)~~), or ~~Pink~~pink (K2EDTA).
Specimen Preparation:	Separate from cells within 2 hours. Transfer 2 mL serum or plasma to an ARUP ~~Standard Transport Tube~~standard transport tube. (Min: 0.7 mL) Test is not performed at ARUP; separate specimens must be submitted when multiple tests are ordered.
Transport Temperature:	~~Refrigerated~~Frozen. Also acceptable: Room temperature and ~~frozen~~refrigerated.
Unacceptable Conditions:	~~Separator tubes.~~Polymer gel separation tube (SST or PST).
Remarks:	
Stability:	Ambient: 2 weeks; Refrigerated: 2 weeks; Frozen: 3 months
Methodology:	Quantitative Gas Chromatography-Mass Spectrometry (GC-MS)
Note:	Amitriptyline is a known interference.
CPT Codes:	80367 ~~(Alt code: G0480)~~
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Reference Interval:	
~~By~~Refer to report	

Deleted Cells

Deleted Cells

TEST CHANGE

Orthopedic Metals Panel (Chromium, Cobalt, Titanium), Body Fluid

3003913, ORTHO PAN

Specimen Requirements:	
Patient Preparation:	
Collect:	Body fluid.
Specimen Preparation:	Transfer 5 mL body fluid to a trace element-free transport tube (ARUP supply #43116) or acid-washed transfer vial (ARUP supply #54350) available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at 800-522-2787. (Min: 2.8 mL) Test is not performed at ARUP; separate specimens must be submitted when multiple tests are ordered.
Transport Temperature:	Refrigerated. Also acceptable: Room temperature or frozen.
Unacceptable Conditions:	Specimens transported in tubes other than trace element-free transport tubes or acid-washed transfer vials.
Remarks:	
Stability:	Ambient: Undefined; Refrigerated: Undefined; Frozen: Undefined
Methodology:	Quantitative Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)
Note:	
CPT Codes:	82495; 83018 x 2
New York DOH Approval Status:	Specimens from New York clients will be sent out to a New York DOH approved laboratory, if possible.
Interpretive Data:	

Reference Interval:

~~By~~Refer to report

TEST CHANGE

Vitamin B3 (Niacin and Metabolites), Serum/Plasma

3021015, VIT B3

Specimen Requirements:	
Patient Preparation:	Collect specimen after a 4-hour fast.
Collect:	Plain Red, Serum Separator Tube (SST), Green (sodium or lithium heparin) or Plasma separator tube (PST)
Specimen Preparation:	Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL of serum or plasma to an ARUP standard transport tube. (Min: 0.3 mL) Separate specimens must be submitted when multiple tests are ordered.
Transport Temperature:	Frozen
Unacceptable Conditions:	Hemolyzed samples. Samples collected in EDTA tubes.
Remarks:	Light protection is preferred during storage and shipment.
Stability:	After separation from cells: Ambient: 6 hours; Refrigerated: ~~Unacceptable~~3 days; Frozen: 1 month
Methodology:	Quantitative High Performance Liquid Chromatography-Tandem Mass Spectrometry
Note:	For determination of vitamin B3 sufficiency, avoid use of vitamin supplements for 24 hours prior to collection.
CPT Codes:	84591
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Niacin (nicotinic acid, NIC) and its metabolites, nicotinamide (NAM) and nicotinuric acid (NUA) are measured in this assay. Measurable concentrations of NIC and NUA typically are not found in fasting specimens and may indicate therapeutic use of niacin.

Vitamin B3 concentrations are reported in nmol/L. To convert to nanograms per milliliter (ng/mL), multiply the reported concentration for nicotinamide by 0.122, nicotinic acid by 0.123, and nicotinuric acid by 0.180.

Reference Interval:

Test Number	Components	Reference Interval
	Nicotinamide	88-400 nmol/L
	Nicotinic Acid	Less than or equal to 80 nmol/L
	Nicotinuric Acid	Less than or equal to 55 nmol/L

TEST CHANGE

NEW TEST

Click for Pricing

Antibiotic Level, Linezolid

3021236, LINEZOLID

Specimen Requirements:	
Patient Preparation:	
Collect:	Plain red.
Specimen Preparation:	Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP standard transport tube. Also acceptable: CSF. (Min: 1 mL) Test is not performed at ARUP; separate specimens must be submitted when multiple tests are ordered.
Transport Temperature:	Frozen. Also acceptable: Refrigerated
Unacceptable Conditions:	Polymer gel separation tube (SST).
Remarks:	
Stability:	Ambient: Unacceptable; Refrigerated: 1 week; Frozen: 3 months
Methodology:	High Performance Liquid Chromatography-Tandem Mass Spectrometry
Note:	
CPT Codes:	80299
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Reference Interval:

Refer to report

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

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Inactivations

The following will be discontinued from ARUP's test menu on August 3, 2026
Replacement test options are indicated when applicable.

Test Number	Test Name	Refer to Replacement Test
0060843	Antibiotic Level, Nafcillin	