Effective as of 08/19/2024

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Test Number	Mnemonic	Test Name	New Test	Test Name Change	Specimen Requirements	Methodology	Performed/Reported	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
0030135	FIBAG	Fibrinogen Antigen														x					
0050047	B2TRNSF	Beta-2 Transferrin			x			x	x												
0050206	VDRL CSF	Treponema pallidum (VDRL), Cerebrospinal Fluid with Reflex to Titer					x														
0050291	HERP PAN	Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgG and IgM (Inactive as of 08/19/24)																			x
0050364	HERPRCSF	Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgG & IgM (CSF) with Reflex to Type 1 & 2 Glycoprotein G-Specific Ab, IgG (Change effective as of 08/19/24: Refer to 3017747 in the August Hotline)																		x	
0050397	MYCO-G	Mycoplasma pneumoniae Antibody, IgG					x														
0050408	HSVMCCSF	Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgM by ELISA, CSF (Inactive as of 08/19/24)																			x
0050477	FTA	Treponema pallidum Antibody, IgG by IFA (FTA-ABS), Serum					x														

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0050641	HSV MC	Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgM by ELISA (Inactive as of 08/19/24)																			x
0050665	TORCH M	TORCH Antibodies, IgM (Change effective as of 08/19/24: Refer to 3017749 in the August Hotline)																		x	
0050908	PHOSA	Phosphatidylserine Antibody, IgA			x	x															
0050916	HERPR PAN	Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgG and IgM with Reflex to Type 1 and 2 Glycoprotein G-Specific Ab, IgG (Inactive as of 08/19/24)																			x
0051302	PROTHROM G	Prothrombin Antibody, IgG			x	x															
0051332	UGT1A1	UDP Glucuronosyltransferase 1A1 (UGT1A1) Genotyping										x									
0055273	FTA CSF G	Treponema pallidum Antibody, IgG by IFA (CSF)					x														
0060200	MA SENS	Antimicrobial Susceptibility - Not Otherwise Specified			x																

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0060203	MA MBC	Antimicrobial Susceptibility - MBC (Inactive as of 08/19/24)																			x
0060204	MA BCT	Antimicrobial Susceptibility - Bactericidal Assays (Inactive as of 08/19/24)																			x
0060846	ML 5-FLUOR	Antifungal Level, 5-Fluorocytosine (5-FC) (Inactive as of 08/19/24)																			x
0065120	PARVO	Parvovirus B19 Antibodies, IgG and IgM							x	x											
0065122	PARVO M	Parvovirus B 19 Antibody, IgM							x	x											
0093093	VDRL SERU	Treponema pallidum (VDRL), Serum with Reflex to Titer					x														
2003547	CD30 IHC	CD30 by Immunohistochemistry		x							x										
2005903	AB W/H SS	Special Stain, Alcian Blue with Hyaluronidase (Inactive as of 08/19/2024)																			x
2008460	RBC BAND3	RBC Band 3 Protein Reduction in Hereditary Spherocytosis			x																

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2008915	ENCEPH	Encephalitis Panel with Reflex to Herpes Simplex Virus Types 1 and 2 Glycoprotein G-Specific Antibodies, IgG, Serum (Change effective as of 08/19/24: Refer to 3017751 in the August Hotline)																		x	
2008916	ENCEPHCSF	Encephalitis Panel with Reflex to Herpes Simplex Virus Types 1 and 2 Glycoprotein G-Specific Antibodies, IgG, CSF (Change effective as of 08/19/24: Refer to 3017752 in the August Hotline)																		x	
2009034	FX PCR FE	Fragile X (FMR1) with Reflex to Methylation Analysis, Fetal			x		x		x												
2009255	HCV REFLEX	Hepatitis C Virus (HCV) Genotype with Reflex to HCV High-Resolution Genotype by Sequencing			x			x	x												
2009447	APS/PT G	Phosphatidylserine and Prothrombin Antibody, IgG			x	x															
2009449	APS/PT M	Phosphatidylserine and Prothrombin Antibody, IgM			x	x															

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2009451	APS/PT PAN	Phosphatidylserine and Prothrombin Antibodies, IgG and IgM			x																
2010784	HCV AB QR	Hepatitis C Virus Antibody by CIA with Reflex to HCV by Quantitative NAAT			x	x		x													
2010921	EGMBP TIS	Eosinophil Granule Major Basic Protein, Tissue Biopsy						x					x					x			
2011415	A-I LEUK	Alpha-Iduronidase Enzyme Activity in Leukocytes					x										x				
2011549	PENTOBAR	Pentobarbital, Serum or Plasma(Change effective as of 08/19/24: Refer to 2012201)																		x	
2012166	DPYD	Dihydropyrimidine Dehydrogenase (DPYD), 3 Variants										x									
2013101	HMGCR	3-Hydroxy-3-Methylglutaryl Coenzyme A Reductase (HMGCR) Antibody, IgG			x	x															
3000572	HEPC QNT	Hepatitis C Virus (HCV) by Quantitative NAAT			x	x		x	x							x					
3000576	HCVQT GR	Hepatitis C Virus (HCV) by Quantitative NAAT with Reflex to HCV Genotype by Sequencing			x	x				x						x					

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3000577	HCVQT HGR	Hepatitis C Virus (HCV) by Quantitative NAAT with Reflex to HCV High-Resolution Genotype by Sequencing			x	x		x		x						x					
3000863	HBV QNT	Hepatitis B Virus (HBV) by Quantitative NAAT			x	x		x	x							x					
3000866	HBV QNT GR	Hepatitis B Virus (HBV) by Quantitative NAAT with Reflex to HBV Genotype by Sequencing			x	x										x					
3001560	HYPER 2	Hypersensitivity Pneumonitis 2					x														
3001561	HYPEREXT	Hypersensitivity Pneumonitis Extended Panel (Farmer's Lung Panel)			x																
3001585	ALZ NGS	Early-Onset Alzheimer's Panel, Sequencing											x								
3001662	OP FEC	Ova and Parasite Exam, Fecal (Immunocompromised or Travel History)			x																
3001947	SMR INTRP	Blood Smear with Interpretation (Inactive as of 08/19/24)																			x
3002989	HEPACUTEQR	Hepatitis Panel, Acute with Reflex to HBsAg Confirmation and Reflex to HCV by Quantitative NAAT			x	x		x													

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3004572	MEN2 NGS	Multiple Endocrine Neoplasia Type 2 (MEN2), RET Sequencing			x																
3005867	FAM NGS	Familial Targeted Sequencing											x								
3005935	RWGS NGS	Rapid Whole Genome Sequencing																	x		
3006247	AS-PWS DD	Angelman Syndrome and Prader-Willi Syndrome by Methylation-Specific MLPA			x																
3006343	PRENAT HEP	Prenatal Hepatitis Panel			x	x		x													
3016493	WGS NGS	Whole Genome Sequencing			x								x						x		
3016497	WGS FRPT	Whole Genome Sequencing, Familial Control											x								
3016583	EXOME PRO	Exome Sequencing			x								x								
3016589	EXOME FRPT	Exome Sequencing, Familial Control											x								
3016636	HPV PRMRY	HPV Primary Screen by PCR With Reflex to Cytology			x								x								
3017009	LUPUS RFLX	Lupus Anticoagulant Reflex Panel						x													
3017156	THROMRISK	Thrombotic Risk Reflex Panel						x													

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3017157	ANTI PHOS	Antiphospholipid Syndrome Reflex Panel						x													
3017615	PDL1 22C3	PD-L1 22C3 by IHC											x								
3017665	GUDPPCR TH	Treponema pallidum, HSV-1 and HSV-2 by PCR	x																		
3017744	MA HPYL	Antimicrobial Susceptibility - Helicobacter pylori	x																		
3017747	HERPR CSF	Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgG (CSF) With Reflex to Type 1 and 2 Glycoprotein G-Specific Ab, IgG	x																		
3017749	TORCH IGM	TORCH Antibodies IgM	x																		
3017751	ENCEPH-SER	Encephalitis Panel With Reflex to Herpes Simplex Virus Types 1 and 2 Glycoprotein G-Specific Antibodies, IgG, Serum	x																		
3017752	ENCEPH-CSF	Encephalitis Panel With Reflex to Herpes Simplex Virus Types 1 and 2 Glycoprotein G-Specific Antibodies, IgG, CSF	x																		
3017783	CD42B-IHC	CD42b by Immunohistochemistry	x																		

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3017816	SO HR ISH	Human Papilloma Virus (HPV) High Risk by In Situ Hybridization Stain Only	x																		
3017822	SO LR ISH	Human Papilloma Virus (HPV) Low Risk by In Situ Hybridization Stain Only	x																		
3017866	DPYDUGT1A1	Dihydropyrimidine Dehydrogenase (DPYD) and UPD Glucuronosyltransferase 1A1 (UGT1A1) Genotyping	x																		
3017909	PERA S/P	Preeclampsia Risk Assessment (sFlt-1/PlGF Ratio)	x																		
3017913	TREE NUTS	Allergens, Food, Tree Nuts Profile IgE	x																		
3017914	FISH GRP2	Allergens, Food, Fish Profile 2 IgE	x																		
3017915	CRUSTACEAN	Allergens, Food, Crustacean Profile IgE	x																		
3017916	MOLLUSKS	Allergens, Food, Mollusks Profile IgE	x																		

TEST CHANGE

Fibrinogen Antigen

0030135, FIBAG

Specimen Requirements:	
Patient Preparation:	
Collect:	Lt. blue (sodium citrate). Refer to Specimen Handling at aruplab.com for hemostasis/thrombosis specimen handling guidelines.
Specimen Preparation:	Transfer 2 mL platelet-poor plasma to an ARUP Standard Transport Tube. (Min: 1 mL)
Transport Temperature:	CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered.
Unacceptable Conditions:	Serum. EDTA plasma, clotted, grossly lipemic, or hemolyzed specimens.
Remarks:	
Stability:	Ambient: 8 hours; Refrigerated: Unacceptable; Frozen: 1 month
Methodology:	Quantitative Immunoturbidimetry
Performed:	Tue, Fri
Reported:	2-4 days
Note:	
CPT Codes:	85385
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Reference Interval:	
149-353 mg/dL	

HOTLINE NOTE: There is a numeric map change associated with this test. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

Beta-2 Transferrin

0050047, B2TRNSF

Specimen Requirements:	
Patient Preparation:	
Collect:	Aural or nasal fluid in sterile container (test tube, microtube, syringe). If submitting syringe, remove needle and cap the end of syringe. ~~Aural or nasal fluid in sterile container. If there is enough secretion, the specimen is collected in a test tube. A specimen can also be obtained by specifically applied suction. Straining, increase in abdominal pressure, or performance of the Valsalva maneuver may result in an increase in drainage. Specimen kept refrigerated may be collected if there is slow or intermittent flow or fluid.~~
Specimen Preparation:	Indicate specimen source. Submit~~Transport~~ 2 mL of aural or nasal fluid in sterile container ~~a tube~~ without preservative. (Min: 1 mL of aural or nasal fluid) If direct collection is not feasible, specimen may be collected using a plain cotton swab or gauze and submitted in a sterile container (plain test tube or collection container). Do not add any liquid to the swab or gauze. Do not collect specimen with a culture swab.
Transport Temperature:	Frozen (preferred) or refrigerated. ~~Refrigerated.~~
Unacceptable Conditions:	Specimens grossly contaminated with blood. Specimens collected with additives (e.g., microbiology media, EDTA, etc.). CSF fluid.
Remarks:	Aural or nasal specimens may be contaminated with saliva, which can degrade transferrin protein. These specimens should be frozen immediately after collection and transported in frozen temperature.
Stability:	Ambient: 2 weeks; Refrigerated: 2 weeks; Frozen: 2 weeks
Methodology:	Qualitative Immunofixation Electrophoresis (IFE)
Performed:	Sun-Sat
Reported:	1-4 days
Note:	Beta-2 transferrin is also found in aqueous humor. Rare allelic

	variants of transferrin may cause false positive results in the detection of CSF leakage. Simultaneous analysis of serum and CSF from the same individual is suggested to rule out these rare false-positive results. ~~The beta-2 transferrin protein assay by IFE methodology is not a reliable method for detecting human perilymph due to the low sensitivity of the assay.~~
CPT Codes:	86335
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Detection of a beta-2 transferrin band by immunofixation~~IFE~~ is indicative of~~diagnostic for~~ the presence of cerebrospinal fluid ~~(CSF). This test is useful~~ in the specimen~~differential diagnosis for CSF otorrhea or CSF rhinorrhea. Beta-2 transferrin is not detected by this methodology in normal serum, tears, saliva, sputum, nasal, or aural fluid.~~

~~This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes~~.

Reference Interval:

None detected

TEST CHANGE

Treponema pallidum (VDRL), Cerebrospinal Fluid with Reflex to Titer

0050206, VDRL CSF

Specimen Requirements:	
Patient Preparation:	
Collect:	CSF.
Specimen Preparation:	Transfer 0.5 mL CSF to an ARUP standard transport tube.~~Standard Transport Tube.~~ (Min: 0.4 mL)
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Other body fluids. Contaminated, hemolyzed, xanthochromic, or severely lipemic specimens.
Remarks:	
Stability:	Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)
Methodology:	Semi-Quantitative Flocculation
Performed:	Sun-Sat
Reported:	1-4~~2~~ days
Note:	If VDRL is weakly reactive or reactive, then a titer will be added. Additional charges apply.
CPT Codes:	86592; if reflexed, add 86593
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Reference Interval:	
Nonreactive	

TEST CHANGE

Mycoplasma pneumoniae Antibody, IgG

0050397, MYCO-G

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube.
Specimen Preparation:	Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP standard transport tube. ~~Standard Transport Tube.~~ (Min: 0.1 mL) Parallel testing is preferred and convalescent specimens must be received within 30 days from receipt of the acute specimens. Mark specimens plainly as "acute" or "convalescent."
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Bacterially contaminated, heat-inactivated, hemolyzed, icteric, lipemic, or turbid specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)
Methodology:	Semi-Quantitative Enzyme-Linked Immunosorbent Assay (ELISA)
Performed:	Sun-Sat
Reported:	1-3~~2~~ days
Note:	
CPT Codes:	86738
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Over 50 percent of healthy adults have a relatively high background of specific *M. pneumoniae* IgG antibodies in their sera, probably because of past *M. pneumoniae* infections. Therefore, paired sera obtained with a time interval of 1 to 3 weeks are highly recommended in adults to confirm reinfection by *M. pneumoniae*, which is demonstrated by a significant change in IgG antibodies. A significant change is indicated if one specimen is above 0.32 U/L and the other is below 0.20 U/L.

Reference Interval:

< 0.10 U/L: Negative
0.10-0.32 U/L: Equivocal

> 0.32 U/L: Positive

TEST CHANGE

Treponema pallidum Antibody, IgG by IFA (FTA-ABS), Serum

0050477, FTA

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube.
Specimen Preparation:	Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP standard transport tube. (Min: 0.4 mL)
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	CSF, plasma, or other body fluids. Contaminated, hemolyzed, or severely lipemic specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)
Methodology:	Semi-Quantitative Indirect Fluorescent Antibody (IFA)
Performed:	Sun-Sat
Reported:	1-4~~3~~ days
Note:	The Fluorescent Treponema Antibody (FTA) is recommended for follow-up of reactive nontreponemal tests for syphilis, and as a single test in patients suspected of late syphilis. The FTA may be used to resolve discrepancies between laboratory results and clinical impressions. FTA tests for syphilis may be falsely positive in some cases of systemic lupus erythematosus, pregnancy, and leprosy. Can be used to provide additional evidence of neurosyphilis when VDRL-CSF test results are reactive.
CPT Codes:	86780
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Reference Interval:	

Test Number	Components	Reference Interval
	T.Pallidum Ab, IgG (FTA-ABS)	Nonreactive

TEST CHANGE

Phosphatidylserine Antibody, IgA

0050908, PHOSA

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum~~One 4 mL 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: 0.3 mL)
Transport Temperature:	Refrigerated. Also acceptable: Frozen. ~~0.5 mL serum at 2-8 Degrees C. (Min: 0.25 mL) Submit specimen in an ARUP Standard Transport Tube.~~
Unacceptable Conditions:	Contaminated, heat~~Heat~~-inactivated, clots, fibrin, gross red blood cells, severely lipemic, severely ~~contaminated, or~~ hemolyzed, or severely icteric specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 2 days; Refrigerated: 2 weeks; Frozen: 1 month
Methodology:	Semi-Quantitative Enzyme-Linked Immunosorbent Assay (ELISA)
Performed:	Sun, Tue, Wed, Fri, Sat
Reported:	1-4 days
Note:	
CPT Codes:	86148
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Reference Interval:

Effective Feb 1, 2021
Less than 20 APS

APS: IgA antiphosphatidylserine units

TEST CHANGE

Prothrombin Antibody, IgG

0051302, PROTHROM G

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube (SST) ORor lt. blue (sodium citrate)).
Specimen Preparation:	Separate serum from cells ASAP or within 2 hours of collection. TransferTransport 0.5 mL serum (Min: 0.3 mL) OR 0.5 mL citrate or plasma (Min: 0.3 mL) to an ARUP standard transport tube.Standard Transport Tube. (Min: 0.3 mL)
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Contaminated, heat-inactivated, clots, fibrin, gross red blood cells, severely lipemic, severely hemolyzed, or severely icteric specimens. Hemolyzed or lipemic specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year
Methodology:	Semi-Quantitative Enzyme-Linked Immunosorbent Assay (ELISA)
Performed:	Mon
Reported:	1-8 days
Note:	
CPT Codes:	86849
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

IgG antibodies to prothrombin may be a risk factor for either venous or arterial thrombosis in antiphospholipid syndrome (APS). Strong clinical correlation is recommended in the absence of lupus anticoagulant, IgG and/or IgM cardiolipin and/or beta2 glycoprotein antibodies.

If results are positive, repeat testing with two or more specimens drawn at least 12 weeks apart to demonstrate persistence of antibodies.

Results should not be used alone for diagnosis and must be interpreted in light of APS-specific clinical manifestations and/or other criteria phospholipid antibody tests.

Reference Interval:

Effective 5/21/2018
Less than 20 Units

TEST CHANGE

UDP Glucuronosyltransferase 1A1 (UGT1A1) Genotyping

0051332, UGT1A1

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender (EDTA), pink (K2EDTA), or yellow (ACD solution A or B)
Specimen Preparation:	Transport 3 mL whole blood. (Min: 1 mL)
Transport Temperature:	Refrigerated. Also acceptable: Ambient.
Unacceptable Conditions:	
Remarks:	
Stability:	Room temperature: 1 week; Refrigerated: 1 month; Frozen: Unacceptable
Methodology:	Polymerase Chain Reaction (PCR)/Fragment Analysis
Performed:	Varies
Reported:	2-7 days
Note:	
CPT Codes:	81350
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Refer to report.	
Reference Interval:	
By report	

HOTLINE NOTE: There is a component change associated with this test. One or more components have been added or removed. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

Treponema pallidum Antibody, IgG by IFA (CSF)

0055273, FTA CSF G

Specimen Requirements:	
Patient Preparation:	
Collect:	CSF.
Specimen Preparation:	Transfer 1 mL CSF to an ARUP standard transport tube.~~Standard Transport Tube.~~ (Min: 0.2 mL)
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Serum. Contaminated, heat-inactivated, or hemolyzed specimens.
Remarks:	
Stability:	Ambient: 48 hours; Refrigerated: 5 days; Frozen: 1 year
Methodology:	Semi-Quantitative Indirect Fluorescent Antibody (IFA)
Performed:	Sun-Sat
Reported:	1-4~~3~~ days
Note:	
CPT Codes:	86780
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

The significance of a reactive result in the FTA-ABS CSF test is unknown. The CSF from persons treated in the secondary or latent stage of syphilis and without signs of neurosyphilis may be reactive. A nonreactive result in the FTA-ABS CSF test suggests the absence of neurosyphilis.

Treponema pallidum (VDRL), Cerebrospinal Fluid with Reflex to Titer (0050206) is the recommended test for CSF specimens. If suspicion of neurosyphilis remains after VDRL testing, testing of the CSF with FTA-ABS may be considered.

~~This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.~~

Reference Interval:

Nonreactive

TEST CHANGE

Antimicrobial Susceptibility - Not Otherwise Specified

0060200, MA SENS

Specimen Requirements:	
Patient Preparation:	
Collect:	Actively growing isolate in pure culture.
Specimen Preparation:	Transport sealed container with pure culture on agar slant. Place each specimen in individually sealed bag.
Transport Temperature:	Room temperature. If culture is suspected of being a microorganism identified on the IATA list as an infectious substance affecting humans, submit specimen according to Infectious Substance, Category A, shipping guidelines.
Unacceptable Conditions:	Mixed cultures or nonviable organisms.
Remarks:	Isolate identification and specimen source required.
Stability:	Ambient: 1 week; Refrigerated: Unacceptable~~1 week~~; Frozen: Unacceptable
Methodology:	Broth Microdilution/Disk Diffusion/Gradient Diffusion
Performed:	Sun-Sat
Reported:	2-7 days
Note:	Aerobic susceptibility testing is organism dependent. Various methods are used and various agents are reported. Specific antibiotics to be tested should be indicated on the test request in order to ensure their inclusion in the panel. An additional processing fee will be billed for all organisms not submitted in pure culture, as indicated in the specimen requirements. If species identification is not provided, identification will be performed at ARUP. Additional charges apply.
CPT Codes:	CPT codes may vary based on method.
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Reference Interval:	

Susceptible, intermediate, or resistant.
Units = μg/mL

ARUP LABORATORIES | *A nonprofit enterprise of the University of Utah and its Department of Pathology*

Effective Date: August 19, 2024

TEST CHANGE

Parvovirus B19 Antibodies, IgG and IgM

0065120, PARVO

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube~~Separator Tube~~ (SST).
Specimen Preparation:	Separate from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP standard transport tube~~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.
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Bacterially contaminated, heat-inactivated, hemolyzed, icteric, lipemic, or turbid specimens.
Remarks:	Mark specimens plainly as "acute" or "convalescent."
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)
Methodology:	Semi-Quantitative Enzyme-Linked Immunosorbent Assay (ELISA)
Performed:	Sun-Sat
Reported:	1-3 days
Note:	
CPT Codes:	86747 x2
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Component	Results	Interpretation
Parvovirus B19 Antibody, IgG	0.90 IV or less 0.91-1.09 IV 1.10 IV or greater	~~0.90 IV or less:~~ Negative:~~.~~ No significant level of detectable Parvovirus B19 IgG antibody. ~~0.91-1.09 IV:~~

Inserted Cells

		Equivocal: ~~-~~ Repeat testing in 7-21 days may be helpful. ~~1.10 IV or greater:~~ Positive: ~~-~~ IgG antibody to Parvovirus B19 detected, which may indicate a current or past infection.
Parvovirus B19~~B 19~~ Antibody, IgM	0.89 IV or less 0.90-1.10 IV 1.11 IV or greater	~~0.90 IV or less:~~ Negative: ~~-~~ No significant level of detectable Parvovirus B19 IgG~~M~~ antibody. ~~0.91-1.09 IV:~~ Equivocal: ~~-~~ Repeat testing in 7-21 days may be helpful. ~~1.10 IV or greater:~~ Positive: ~~-~~ IgG~~M~~ antibody to Parvovirus B19 detected, which may indicate a current or past~~recent~~ infection. However, low levels of IgM antibodies may occasionally persist for more than 12 months post-infection.

Reference Interval:

Test Number	Components	Reference Interval
	Parvovirus B19 Antibody IgG	0.90 IV or less
	Parvovirus B19 Antibody IgM	0.89~~90~~ IV or less

ARUP LABORATORIES | A nonprofit enterprise of the University of Utah and its Department of Pathology

Effective Date: August 19, 2024

TEST CHANGE

Parvovirus B 19 Antibody, IgM

0065122, PARVO M

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube~~Separator Tube~~ (SST).
Specimen Preparation:	Separate from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum to an ARUP standard transport tube~~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.
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Bacterially contaminated, heat-inactivated, hemolyzed, icteric, lipemic, or turbid specimens.
Remarks:	Mark specimens plainly as "acute" or "convalescent."
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)
Methodology:	Semi-Quantitative Enzyme-Linked Immunosorbent Assay (ELISA)
Performed:	Sun-Sat
Reported:	1-3 days
Note:	
CPT Codes:	86747
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

The best evidence for current infection is a significant change on two appropriately timed specimens, where both tests are done in the same laboratory at the same time.

Appearance of an IgM antibody response normally occurs 7 to 14 days after the onset of disease. Testing immediately post-exposure is of no value without a later convalescent specimen. A residual IgM response may be distinguished from early IgM response to infection by testing sera from patients three to four weeks later for changing levels of specific IgM antibodies.

Component	Results ~~Intrepretation~~	Interpretation
Parvovirus B19 Antibody, IgM	0.89 IV or less 0.90-1.10 IV 1.11 IV or greater	~~0.90 IV or less:~~ Negative:~~ ~~ No significant level of detectable Parvovirus B19 ~~IgM~~ antibody. ~~0.91-1.09 IV:~~ Equivocal:~~ ~~ Repeat testing in 7-21 days may be helpful. ~~1.10 IV or greater:~~ Positive:~~ ~~ IgM antibody to Parvovirus B19 detected, which may indicate a current or recent infection. However, low levels of IgM antibodies may occasionally persist for more than 12 months post-infection.

Inserted Cells

Inserted Cells

Reference Interval:

Test Number	Components	Reference Interval
	Parvovirus B19 Antibody IgM	0.89~~90~~ IV or less

TEST CHANGE

Treponema pallidum (VDRL), Serum with Reflex to Titer

0093093, VDRL SERU

Specimen Requirements:	
Patient Preparation:	
Collect:	Plain red or serum separator tube.
Specimen Preparation:	Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP standard transport tube (Min: 0.4 mL)
Transport Temperature:	Refrigerated
Unacceptable Conditions:	CSF or other body fluids. Contaminated, heat-inactivated, hemolyzed, or severely lipemic specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)
Methodology:	Semi-Quantitative Flocculation
Performed:	Sun-Sat
Reported:	1-42 days
Note:	If VDRL is reactive, a titer will be added. Additional charges apply.
CPT Codes:	86592; if reflexed, add 86593
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

VDRL as a screening test is less sensitive than RPR.

Reference Interval:

Nonreactive

TEST CHANGE

CD30 ~~(Ki-1)~~ by Immunohistochemistry

2003547, CD30 IHC

Specimen Requirements:	
Patient Preparation:	
Collect:	Tissue or cells.
Specimen Preparation:	Formalin fix (10 percent neutral buffered formalin) and paraffin embed specimen (cells must be prepared into a cellblock). Protect paraffin block and/or slides from excessive heat. Transport tissue block or 5 unstained (3- to 5-micron thick sections), positively charged slides in a tissue transport kit (ARUP supply #47808). Available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at ~~(~~800~~-)~~ 522-2787~~.~~ (Min: 2 slides). If sending precut slides, do not oven bake.
Transport Temperature:	Room temperature or refrigerated. Ship in cooled container during summer months.
Unacceptable Conditions:	Depleted specimens. Specimens submitted with nonrepresentative~~non-representative~~ tissue type.
Remarks:	IMMUNOHISTOCHEMISTRY ORDERING AND SUBMISSION DETAILS: Submit electronic request. If you do not have electronic ordering capability, use an ARUP Immunohistochemistry Stain Form (#32978) with an ARUP client number. For additional technical details, please contact ARUP Client Services.
Stability:	Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Indefinitely
Methodology:	Immunohistochemistry (IHC)
Performed:	Mon-Fri
Reported:	1-3 days
Note:	This test is performed as a stain and return (technical) service only.
CPT Codes:	88342
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Reference Interval:

Test Number	Components	Reference Interval

TEST CHANGE

RBC Band 3 Protein Reduction in Hereditary Spherocytosis

2008460, RBC BAND3

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender (EDTA) or green (sodium or lithium heparin). ~~Include a Wright stained slide.~~
Specimen Preparation:	Transport 4 mL whole blood in the original container. (Min: 0.5 mL)
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Clotted or hemolyzed specimens. Specimens older than 7 days.
Remarks:	Specimens must be analyzed within 7 days of collection.
Stability:	Ambient: 3 days; Refrigerated: 7 days; Frozen: Unacceptable
Methodology:	Qualitative Flow Cytometry
Performed:	Sun-Sat
Reported:	1-3 days
Note:	
CPT Codes:	88184
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

This test can be used to confirm a suspected diagnosis of hereditary spherocytosis (HS). HS is a common inherited hemolytic anemia characterized by the presence of spherical erythrocytes (spherocytes). HS is diagnosed based on family history and clinical features, along with clinical laboratory tests, including peripheral smear examination, osmotic fragility (OF), flow cytometry, or by genetic testing (Hereditary Hemolytic Anemia Panel Sequencing, ARUP test code 2012052).

Band 3 (or solute carrier family 4 member 1, SLC4A1) is the most abundant transmembrane protein found in human red blood cells (RBC). Eosin-5-maleimide (EMA) dye binds to band 3 on intact RBC's. A reduction of fluorescence intensity will be seen in hereditary spherocytosis. This test by flow cytometry has been reported to have a sensitivity of 93 percent for a diagnosis of HS. Congenital dyserythropoietic anemia type II, Southeast Asian ovalocytosis and hereditary pyropoikilocytosis are rare disorders that may also show a positive result.

Reference Interval:

Normal

TEST CHANGE

Fragile X (FMR1) with Reflex to Methylation Analysis, Fetal

2009034, FX PCR FE

Specimen Requirements:	
Patient Preparation:	
Collect:	Fetal Cultured Amniocytes ~~or Cultured CVS~~ AND Maternal Whole Blood Specimen : Lavender (EDTA), pink (K2EDTA), or yellow (ACD solution A or B).
Specimen Preparation:	Cultured Amniocytes ~~or Cultured CVS~~: Transfer cultured amniocytes ~~or cultured CVS~~ to two T-25 flasks at 80 percent confluence (Min: one T-25 flask at 80 percent confluence). Backup cultures must be retained at the client's institution until testing is complete. If ARUP receives a sample below the minimum confluence, Cytogenetics Grow and Send (ARUP test code 0040182) will be added on by ARUP, and additional charges will apply. If clients are unable to culture specimens, Cytogenetics Grow and Send should be added to initial order. Maternal Whole Blood Specimen: Transport 2 mL whole blood. (Min: 1 mL)
Transport Temperature:	Cultured Amniocytes ~~or Cultured CVS~~: CRITICAL ROOM TEMPERATURE. Must be received within 48 hours of collection due to viability of cells. Maternal Whole Blood Specimen: Room temperature.
Unacceptable Conditions:	
Remarks:	Methylation patterns may not be fully established in early gestation; thus, methylation testing performed on chorionic villus samples may not distinguish between premutation and full mutation alleles.
Stability:	Cultured Amniocytes ~~or Cultured CVS~~: Room temperature: 48 hours; Refrigerated: Unacceptable; Frozen: Unacceptable Maternal Whole Blood Specimen: Room temperature: 7 days; Refrigerated: 1 month; Frozen: Unacceptable
Methodology:	Polymerase Chain Reaction (PCR)/Capillary Electrophoresis
Performed:	Varies~~Sun-Sat~~
Reported:	9-10 days
Note:	If a CGG repeat of 55 or greater is detected by PCR and capillary electrophoresis, methylation analysis will be added.

Additional charges apply.

CPT Codes:	81243; 81265 Fetal Cell Contamination (FCC); if reflexed, add 81244
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Refer to report. ~~Background information for Fragile X (FMR1) with Reflex to Methylation Analysis, Fetal~~

~~Characteristics of Fragile X syndrome (FXS): Affected males have moderate intellectual disability, hyperactivity, perseverative speech, social anxiety, poor eye contact, hand flapping or biting, autism spectrum disorders, and connective tissue anomalies. Females are usually less severely affected than males.~~

~~Characteristics of Fragile X tremor ataxia syndrome (FXTAS): Onset of progressive ataxia and intention tremor typically after the fourth decade of life. Females also have a 21 percent risk for primary ovarian insufficiency.~~

~~Incidence of FXS: 1 in 4,000 White males and 1 in 8,000 White females.~~

~~Inheritance: X-linked.~~

~~Penetrance of FXS: Complete in males; 50 percent in females.~~

~~Penetrance of FXTAS: 47 percent in males and 17 percent in females >50 years of age.~~

~~Cause: Expansion of the FMR1 gene CGG triplet repeat.~~

~~- Full mutation: typically >200 CGG repeats (methylated).~~

~~- Premutation: 55 to approx. 200 CGG repeats (unmethylated).~~

~~- Intermediate: 45-54 CGG repeats (unmethylated).~~

~~- Normal: 5-44 CGG repeats (unmethylated).~~

~~Clinical Sensitivity: 99 percent.~~

~~Methodology: Triplet repeat-primed polymerase chain reaction (PCR) followed by size analysis using capillary electrophoresis. Methylation-specific PCR analysis is performed for CGG repeat lengths of 55 or greater to distinguish between premutation and full mutation alleles.~~

~~Analytic Sensitivity and Specificity: 99 percent; estimated precision of sizing for intermediate and premutation alleles is within 2-3 CGG repeats.~~

~~Limitations: Methylation patterns may not be fully established in early gestation; thus, diagnostic testing on chorionic villus samples is not recommended. Diagnostic errors can occur due to rare sequence variations. Rare FMR1 variants unrelated to trinucleotide expansion will not be detected. A specific CGG repeat size estimate is not provided for full mutation alleles. AGG trinucleotide interruptions within the FMR1 CGG repeat tract are not assessed.~~

~~Counseling and informed consent are recommended for genetic testing. Consent forms are available online.~~

Phenotype	Number of CGG Repeats
Unaffected	< 45
Intermediate	45-54
Premutation	55-200
Affected	>200

Reference Interval:

By report

TEST CHANGE

Hepatitis C Virus (HCV) Genotype with Reflex to HCV High-Resolution Genotype by Sequencing

2009255, HCV REFLEX

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender (EDTA), pink (K2EDTA), plasma preparation tube, or serum separator tube.
Specimen Preparation:	Separate ~~serum or plasma~~ from cells ASAP or within 24~~6~~ hours of collection. ~~.~~ Transfer 2 mL serum or plasma to an ARUP standard transport tube. ~~Standard Transport Tube.~~ (Min: 1 mL)
Transport Temperature:	Frozen.
Unacceptable Conditions:	Heparinized specimens.
Remarks:	
Stability:	On cells: Ambient: Unacceptable; ~~6 hours; After separation from cells:~~ Refrigerated: 72 hours; Frozen: 4 Months.
Methodology:	Sequencing/Polymerase Chain Reaction ~~/Sequencing~~
Performed:	Sun-Sat
Reported:	8-10 days
Note:	This test may be unsuccessful if HCV RNA viral load is less than log 4.2~~5.0~~ or 16~~100~~,000 IU/mL. If initial result is "1a or 1b," or a mixed genotype containing t~~T~~ype 1, or t~~T~~ype 6, then Hepatitis C High Resolution Genotyping will be added. Additional charges apply.
CPT Codes:	87902; if reflexed, add 87902
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Refer to report. ~~Refer to report.~~

~~This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.~~

Reference Interval:

By report

TEST CHANGE

Phosphatidylserine and Prothrombin Antibody, IgG

2009447, APS/PT G

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube (SST) OR lt. blue~~. Also acceptable: Blue~~ (sodium citrate)~~).~~
Specimen Preparation:	Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum (Min: 0.3 mL) OR 0.5 mL citrate ~~or~~ plasma (Min: 0.3 mL) to an ARUP standard transport tube.~~Standard Transport Tube. (Min: 0.15 mL)~~
Transport Temperature:	Refrigerated. Also acceptable: Frozen.
Unacceptable Conditions:	~~Other body fluids.~~ Contaminated, heat-inactivated, clots, fibrin, gross red blood cells, severely lipemic, severely hemolyzed, ~~grossly icteric,~~ or severely ~~l~~ict~~p~~er~~m~~ic specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)
Methodology:	Semi-Quantitative Enzyme-Linked Immunosorbent Assay (ELISA)
Performed:	Thu
Reported:	1-8 days
Note:	
CPT Codes:	83516
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Elevated and persistent aPS/PT IgG antibody (with or without lupus anticoagulant activity) may serve as a risk marker of thrombotic events in patients with certain autoimmune diseases, including antiphospholipid syndrome (APS) and systemic lupus erythematosus (SLE).

Reference Interval:

0-30 Units

TEST CHANGE

Phosphatidylserine and Prothrombin Antibody, IgM

2009449, APS/PT M

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube (SST) OR lt. blue~~. Also acceptable: Blue~~ (sodium citrate)~~).~~
Specimen Preparation:	Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum (Min: 0.3 mL) OR 0.5 mL citrate ~~or~~ plasma (Min: 0.3 mL) to an ARUP standard transport tube.~~Standard Transport Tube. (Min: 0.15 mL)~~
Transport Temperature:	Refrigerated. Also acceptable: Frozen.
Unacceptable Conditions:	~~Other body fluids.~~ Contaminated, heat-inactivated, clots, fibrin, gross red blood cells, severely lipemic, severely hemolyzed, ~~grossly icteric,~~ or severely ~~l~~ict~~p~~er~~m~~ic specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)
Methodology:	Semi-Quantitative Enzyme-Linked Immunosorbent Assay (ELISA)
Performed:	Thu
Reported:	1-8 days
Note:	
CPT Codes:	83516
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Reference Interval:	
0-30 Units	

TEST CHANGE

Phosphatidylserine and Prothrombin Antibodies, IgG and IgM

2009451, APS/PT PAN

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube (SST) OR lt. blue~~. Also acceptable: Blue~~ (sodium citrate)~~).~~
Specimen Preparation:	Separate serum from cells ASAP or within 2 hours of collection. Transfer 0.5 mL serum (Min: 0.3 mL) OR 0.5 mL citrate ~~or~~ plasma (Min: 0.3 mL) to an ARUP standard transport tube.~~Standard Transport Tube. (Min: 0.15 mL)~~
Transport Temperature:	Refrigerated. Also acceptable: Frozen.
Unacceptable Conditions:	~~Other body fluids.~~ Contaminated, heat-inactivated, clots, fibrin, gross red blood cells, severely lipemic, severely hemolyzed, ~~grossly icteric,~~ or severely ~~l~~ict~~p~~er~~m~~ic specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)
Methodology:	Semi-Quantitative Enzyme-Linked Immunosorbent Assay (ELISA)
Performed:	Thu
Reported:	1-8 days
Note:	
CPT Codes:	83516 x2
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

The presence of elevated and persistent aPS/PT IgG and IgM antibodies (with or without lupus anticoagulant activity) may serve as a risk marker of thrombotic events in patients with certain autoimmune diseases, including antiphospholipid syndrome (APS) and systemic lupus erythematosus (SLE). Strong clinical correlation is recommended for isolated IgM aPS/PT antibody.

Reference Interval:

Test Number	Components	Reference Interval
	Phosphatidylserine and Prothrombin IgG	0-30 Units
	Phosphatidylserine and Prothrombin IgM	0-30 Units

TEST CHANGE

Hepatitis C Virus Antibody by CIA with Reflex to HCV by Quantitative NAAT

2010784, HCV AB QR

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube~~Separator Tube~~ (SST). Also acceptable: Lavender (EDTA) or p~~P~~ink (K2EDTA).
Specimen Preparation:	Separate from cells within 6 hours of collection. Transfer 2.5 mL serum or plasma to an ARUP standard transport tube.~~Standard Transport Tube.~~ (Min: 1.5 mL).~~)~~ This test requires a dedicated transport tube submitted only for HCV AB QR testing.
Transport Temperature:	Frozen.
Unacceptable Conditions:	Heparinized plasma.Specimens containing particulate material. Severely hemolyzed, heat-inactivated, or lipemic specimens. ~~Heparinized plasma.~~
Remarks:	
Stability:	After separation from cells: Ambient: 24 hours; Refrigerated: 6~~5~~ days; Frozen: 2 months (avoid freeze/thaw cycles)
Methodology:	Qualitative Chemiluminescent Immunoassay (CLIA)~~/)~~ Quantitative Polymerase Chain Reaction (PCR~~Transcription-Mediated Amplification (TMA~~)
Performed:	Sun-Sat
Reported:	1-2 days
Note:	If the anti-HCV screening result is low positive or high positive, the Hepatitis C Virus (HCV) by Quantitative NAAT will be added. Additional charges apply.
CPT Codes:	86803; if reflexed, add 87522
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

This assay should not be used for blood donor screening, associated re-entry protocols, or for screening human cell, tissues~~Human Cell, Tissues~~, and c~~C~~ellular- and tissue-based products~~Tissue-Based Products~~ (HCT/P).

Components	Interpretation
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

Reference Interval:

Test Number	Components	Reference Interval
	Hepatitis C Antibody by CIA Interp	Negative

TEST CHANGE

Eosinophil Granule Major Basic Protein, Tissue Biopsy

2010921, EGMBP TIS

Specimen Requirements:	
Patient Preparation:	
Collect:	Tissue.
Specimen Preparation:	Transport tissue (optimal 3-8 mm) in Michel medium (ARUP supply #45462) available online through eSupply using ARUP Connect (TM) or call ARUP Client Services at {800-} 522-2787. (Min: 1 mm). Also acceptable: Zeus tissue fixative, flash frozen fresh tissue, formalin fixed tissue, or formalin -fixed and paraffin -embedded tissue. Transport in formalin, tissue block, or slides with two 4-5-micron sections per slide in serial order and numbered. (Min: 8 slides).
Transport Temperature:	Room temperature. Flash Frozen Fresh Tissue: Frozen
Unacceptable Conditions:	
Remarks:	
Stability:	Michel Medium or Zeus Tissue Fixative: Ambient: 10 days; Refrigerated: 10 days; Frozen: Unacceptable Formalin -Fixed Tissue: Ambient: 3 weeks; Refrigerated: 3 weeks; Frozen: Unacceptable Flash Frozen Fresh Tissue: Ambient: Unacceptable; Refrigerated: Unacceptable; Frozen: Indefinitely Paraffin -Embedded Tissue: Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Indefinitely
Methodology:	Indirect Immunofluorescence (IIF)
Performed:	Varies
Reported:	7-21 days
Note:	Turnaround time may be prolonged on specimens submitted as formalin-fixed, paraffin-embedded (FFPE) tissue; clients should consider contacting the Immunodermatology Laboratory when submitting FFPE tissue for Eosinophil Granule Major Basic Protein, Tissue to discuss specific clinical information that may indicate expedited testing and resulting. Contact ARUP Client Services at 1-800-242-2787, option 2, and ask to speak with the Immunodermatology Laboratory at the University of Utah regarding patient results and/or testing information. If formalin fixed, or FFPE tissue is submitted, additional stain will be performed. If multiple specimens are submitted, testing

	will be performed on each specimen. Additional charges apply.
CPT Codes:	88305; 88342; if Formalin Fixed tissue, add 88341
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Refer to report	
Reference Interval:	
By report	

HOTLINE NOTE: There is a reflexive pattern change associated with this test. One or more orderable or component has been added or removed to the reflexive pattern. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

Alpha-Iduronidase Enzyme Activity in Leukocytes

2011415, A-I LEUK

Specimen Requirements:	
Patient Preparation:	
Collect:	Yellow (ACD Solution B), lLavender (K2EDTA), or lLavender (K3EDTA).
Specimen Preparation:	Transport 3 mL whole blood. (Min: 1 mL)
Transport Temperature:	Room temperature (preferredTemperature (Preferred) or rRefrigerated
Unacceptable Conditions:	Grossly hemolyzed or heparinized specimens.
Remarks:	Additional information is required: Clinical Indication for testing.
Stability:	Ambient: 3 days; Refrigerated: 3 days; Frozen: Unacceptable
Methodology:	Quantitative Fluorometry
Performed:	MonVaries
Reported:	3-10 days
Note:	
CPT Codes:	82657
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Refer to report. Refer to report.	
This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.	
Reference Interval:	
12- -65 nmol hydrolyzed/hr/mg protein	

HOTLINE NOTE: There is a unit of measure change associated with this test. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

Dihydropyrimidine Dehydrogenase (DPYD), 3 Variants

2012166, DPYD

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender (EDTA), pink (K2EDTA), or yellow (ACD Solution A or B).
Specimen Preparation:	Transport 3 mL whole blood. (Min: 1 mL)
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Plasma or serum. Heparinized specimens. Frozen specimens in glass collection tubes.
Remarks:	
Stability:	Ambient: 72 hours; Refrigerated: 1 week; Frozen: 1 month.
Methodology:	Polymerase Chain Reaction (PCR)/Fluorescence Monitoring
Performed:	Varies
Reported:	5-10 days
Note:	
CPT Codes:	81232
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Refer to report

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Couseling and informed consent are recommended for genetic testing. Consent forms are available online.

Reference Interval:

HOTLINE NOTE: There is a component change associated with this test. One or more components have been added or removed. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

3-Hydroxy-3-Methylglutaryl Coenzyme A Reductase (HMGCR) Antibody, IgG

2013101, HMGCR

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube~~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: 0.3~~1~~5 mL) to an ARUP standard transport tube.
Transport Temperature:	Refrigerated. Also acceptable: Frozen.
Unacceptable Conditions:	~~Other body fluids.~~ Contaminated, heat-inactivated, clots, fibrin, gross red blood cells, severely lipemic, severely hemolyzed, ~~grossly icteric,~~ or severely ~~l~~ict~~p~~er~~m~~ic specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)
Methodology:	Semi-Quantitative Enzyme-Linked Immunosorbent Assay (ELISA)
Performed:	Fri
Reported:	1-15 days
Note:	
CPT Codes:	83516
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

IgG antibodies to 3-hydroxy-3-methylglutaryl-coenzyme A reductase (HMGCR) are mainly associated with necrotizing autoimmune myopathy (NAM) in a subset of statin-treated patients. Although infrequent, these antibodies may also be observed in statin-naive patients with NAM. Strong clinical correlation is recommended in the absence of muscle fiber necrosis, elevated serum creatine kinase, perimysial pathology, and/or statin exposure.

~~This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.~~

Reference Interval:

0-19 Units: Negative

TEST CHANGE

Hepatitis C Virus (HCV) by Quantitative NAAT

3000572, HEPC QNT

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender (EDTA), pink (K2EDTA), ~~yellow (ACD),~~ plasma preparation tube (PPT), or serum separator tube (SST).
Specimen Preparation:	Separate from cells within 24~~6~~ hours of collection. Transfer 2 mL serum or plasma to an ARUP standard transport tube (ARUP supply #15824). Available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at 800-522-2787. (Minimum volume~~. (Min~~: 1.3~~2~~ mL)
Transport Temperature:	Frozen~~.~~
Unacceptable Conditions:	Heparinized specimens~~.~~
Remarks:	
Stability:	After separation from cells: Room temperature~~Ambient~~: 24 hours (Critical: s~~S~~hip FROZEN); Refrigerated: 6~~5~~ days; Frozen: 3~~2~~ months
Methodology:	Quantitative Polymerase Chain Reaction (PCR~~Transcription-Mediated Amplification (TMA~~)
Performed:	Sun-Sat
Reported:	1-3 days
Note:	The limit of quantification for this RNA assay is 15~~10~~ IU/mL (1.18~~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 test will be reported as "Not Quantified, Detected." ~~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 uL 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 antiviral 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 nonsustained viral response.~~

CPT Codes:	87522
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

~~Normal range for this assay is "Not Detected."~~
The quantitative range of this test~~assay~~ is 15~~10~~ -100,000,000 IU/mL (1.18~~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 is intended for use as an aid in the diagnosis of HCV infection in the following populations: individuals with antibody evidence of HCV with evidence of liver disease, individuals suspected to be actively infected with HCV antibody evidence, and individuals at risk for HCV infection with antibodies to HCV. Detection of HCV RNA indicates that the virus is replicating and therefore is evidence of active infection.

This test is also intended for use as an aid in the management of patients with an HCV infection undergoing antiviral therapy. The assay can be used to measure 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 nonsustained viral response. The results must be interpreted within the context of all relevant clinical and laboratory findings.

This test should not be used for blood donor screening, associated reentry protocols, or for screening human cells, tissues and cellular tissue-based products (HCT/P).

Reference Interval:

Not Detected

HOTLINE NOTE: There is a numeric map change associated with this test. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

Hepatitis C Virus (HCV) by Quantitative NAAT with Reflex to HCV Genotype by Sequencing

3000576, HCVQT GR

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender (EDTA), pink (K2EDTA), plasma preparation tube (PPT), or serum separator tube (SST).
Specimen Preparation:	Separate from cells within 24~~6~~ hours of collection. Transfer 3 mL serum or plasma to an ARUP standard transport tube (ARUP supply #15824). Available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at 800-522-2787. (Minimum volume~~. (Min~~: 1.8~~7~~ mL)
Transport Temperature:	Frozen~~.~~
Unacceptable Conditions:	Heparinized specimens~~.~~
Remarks:	
Stability:	After separation from cells: Room temperature~~Ambient~~: 24 hours (Critical: s~~S~~hip FROZEN); Refrigerated: 72 hours; Frozen: 3 months~~6 weeks~~
Methodology:	Quantitative Polymerase Chain Reaction (PCR)/Sequencing~~Transcription-Mediated Amplification (TMA)~~
Performed:	Sun-Sat
Reported:	1-8 days
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 Codes:	87522; if reflexed, add 87902
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Refer to report.	
Reference Interval:	

Test Number	Components	Reference Interval
	HCV Qnt by NAAT Interp	Not Detected

HOTLINE NOTE: There is a numeric map change associated with this test. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

Hepatitis C Virus (HCV) by Quantitative NAAT with Reflex to HCV High-Resolution Genotype by Sequencing

3000577, HCVQT HGR

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender (EDTA), pink (K2EDTA), plasma preparation tube (PPT), or serum separator tube (SST).
Specimen Preparation:	Separate from cells within 246 hours of collection. Transfer 3 mL serum or plasma to an ARUP standard transport tube (ARUP supply #15824). Available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at 800-522-2787. (Minimum volume. (Min: 1.87 mL)
Transport Temperature:	Frozen.
Unacceptable Conditions:	Heparinized specimens.
Remarks:	
Stability:	After separation from cells: Room temperature. Ambient: 24 hours (Critical: sShip FROZEN); Refrigerated: 72 hours; Frozen: 3 months6 weeks
Methodology:	Quantitative Polymerase Chain Reaction (PCR)/SequencingTranscription-Mediated Amplification (TMA)
Performed:	Sun-Sat
Reported:	1-11 days
Note:	If Hepatitis C Virus by Quantitative NAAT result is greater than or equal to 161100,000 IU/mL, then Hepatitis C Virus High-Resolution Genotype by Sequencing will be added. Additional charges apply.
CPT Codes:	87522; if reflexed, add 87902
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Refer to report.	
Reference Interval:	

Test Number	Components	Reference Interval
	HCV Qnt by NAAT Interp	Not Detected

HOTLINE NOTE: There is a numeric map change associated with this test. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

Hepatitis B Virus (HBV) by Quantitative NAAT

3000863, HBV QNT

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender (EDTA), pink (K2EDTA), ~~yellow (ACD),~~ plasma preparation tube (PPT), or serum separator tube (SST).
Specimen Preparation:	Separate from cells within 24 hours. Transfer 2 mL serum or plasma to an ARUP standard transport tube (ARUP supply #15824). Available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at 800-522-2787. (Min: 1.3 mL) ~~. (Min: 0.8 mL)~~
Transport Temperature:	Frozen
Unacceptable Conditions:	Heparinized specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 24 hours (Critical: s~~S~~hip FROZEN); Refrigerated: 6~~5~~ days; Frozen: 3~~2~~ months
Methodology:	Quantitative Polymerase Chain Reaction (PCR~~Transcription-Mediated Amplification (TMA~~)
Performed:	Sun-Sat
Reported:	2-4 days
Note:	The limit of quantification for this DNA assay is 1.00 log IU/mL (10 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 viral load, the test result will be reported as "Not Quantified, Detected". ~~"< 10 Detected." Specimens received with less than minimum volume for testing will automatically be run with a dilution. Specimens with 240-700 microL will be diluted, resulting in a modification of the quantitative range of the assay to 1.48-9.48 log IU/mL (30-3,000,000,000 IU/mL). This test is intended for use in conjunction with clinical presentation and other laboratory markers as an indicator of disease prognosis. This test is also used as an aid in assessing viral response to treatment as measured by changes in HBV DNA concentration.~~

CPT Codes:	87517
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

~~Normal range for this assay is "Not Detected".~~
The quantitative range of this test~~assay~~ is 1.00-9.00 log IU/mL (10-1,000,000,000 IU/mL).

An interpretation of "Not Detected" does not rule out the presence of inhibitors in the patient specimen or HBV DNA concentration below the level of detection of the test. Care should be taken when interpreting any single viral load determination.

This test is intended for use as an aid in the management of patients with chronic HBV infection undergoing anti-viral therapy. The test can be used to measure HBV DNA levels at baseline and during treatment to aid in assessing response to treatment. Results must be interpreted within the context of all relevant clinical and laboratory findings.

This assay should not be used for blood donor screening, associated reentry protocols, or for screening human cell, tissues and cellular tissue-based products (HCT/P).

Reference Interval:

Not detected

HOTLINE NOTE: There is a numeric map change associated with this test. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

Hepatitis B Virus (HBV) by Quantitative NAAT with Reflex to HBV Genotype by Sequencing

3000866, HBV QNT GR

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender (EDTA), pink (K2EDTA), plasma preparation tube (PPT), or serum separator tube (SST).
Specimen Preparation:	Separate from cells within 24 hours. Transfer 43.5 mL serum or plasma to an ARUP standard transport tube. (Min: 1.85 mL)
Transport Temperature:	Frozen.
Unacceptable Conditions:	Heparinized specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 24 hours (Critical: sShip FROZEN); Refrigerated: 65 days; Frozen: 6 weeks
Methodology:	Quantitative Polymerase Chain Reaction (PCR)/SequencingTranscription-Mediated Amplification (TMA)
Performed:	Sun-Sat
Reported:	2-14 days
Note:	If Hepatitis B Virus by Quantitative NAAT result is greater than or equal to 3.00 log IU/mL (1000 IU/mL), then Hepatitis B Virus Genotype by Sequencing will be added. Additional charges apply.
CPT Codes:	87517; if reflexed, add 87912
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Refer to report.	
Reference Interval:	

Test Number	Components	Reference Interval
	HBV Qnt by NAAT Interp	Not Detected

HOTLINE NOTE: There is a numeric map change associated with this test. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

Hypersensitivity Pneumonitis 2

3001560, HYPER 2

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube~~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.~~Standard Transport Tube.~~ (Min: 0.15 mL)
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Plasma.
Remarks:	
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)
Methodology:	Qualitative Immunodiffusion
Performed:	Sun-Sat~~Mon-Fri~~
Reported:	3-7~~5~~ days
Note:	Testing includes antibodies directed at Aspergillus fumigatus #2, A. fumigatus #3, A. flavus, Saccharomonospora viridis, and Thermoactinomyces candidus.
CPT Codes:	86331 x2; 86606 x3
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Reference Interval:

Test Number	Components	Reference Interval
	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

TEST CHANGE

Hypersensitivity Pneumonitis Extended Panel (Farmer's Lung Panel)

3001561, HYPEREXT

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube~~Separator Tube~~ (SST).
Specimen Preparation:	Separate from cells ASAP or within 2 hours of collection. Transfer two 2.5 mL aliquots of serum to individual ARUP standard transport tubes. (Min: 1.6~~5~~ mL total, 0.8 mL in two aliquots)
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Plasma. Contaminated, hemolyzed, or severely lipemic specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)
Methodology:	Qualitative Immunodiffusion/Quantitative ImmunoCAP Fluorescent Enzyme Immunoassay
Performed:	Sun-Sat
Reported:	3-7 days
Note:	Testing includes antibodies directed at Aspergillus fumigatus #1, A. fumigatus #2, A. fumigatus #3, A. fumigatus #6, A. flavus, Aureobasidium pullulans, Micropolyspora faeni, Thermoactinomyces vulgaris #1, T.~~T.~~ candidus, Saccharomonospora viridis and pigeon serum. Testing also includes the following allergens: feather mix, beef, pork~~Feather Mix, Beef, Pork~~, and Phoma betae.
CPT Codes:	86003 x3; 86005; 86331 x5; 86606 x5
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Allergen results of 0.10-0.34 kU/L are intended for specialist use as the clinical relevance is undetermined. Even though increasing ranges are reflective of increasing concentrations of allergen-specific IgE, these concentrations may not correlate with the degree of clinical response or skin testing results when challenged with a specific allergen. The correlation of allergy

laboratory results with clinical history and in vivo reactivity to specific allergens is essential. A negative test may not rule out clinical allergy or even anaphylaxis.

Reference Interval:

TEST CHANGE

Early-Onset Alzheimer's Panel, Sequencing

3001585, ALZ NGS

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender or pink (EDTA) or yellow (ACD solution A or B). New York State Clients: Two Lavender (EDTA)
Specimen Preparation:	Transport 3 mL whole blood. (Min: 2 mL) New York State Clients: transport 8 mL (Min: 6mL) in two lavender (EDTA) tubes
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Serum or plasma; grossly hemolyzed or frozen specimens; saliva, buccal brush, or swab; FFPE tissue.
Remarks:	DNA extraction will be performed upon sample receipt to ensure stability. DNA Extract and Hold (ARUP test 3005714) will be added by ARUP. A DNA extraction fee will only be charged once per sample.
Stability:	Ambient: 72 hours; Refrigerated: 2 weeks; Frozen: Unacceptable New York State Clients: Ambient: 10 days; Refrigerated: 10 days; Frozen: Unacceptable
Methodology:	Massively Parallel Sequencing
Performed:	Varies
Reported:	10-15 days
Note:	Genes tested: APP, PSEN1, PSEN2
CPT Codes:	81405; 81406
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.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

Counseling and informed consent are recommended for genetic testing. Consent forms are available online.

Reference Interval:

By report

HOTLINE NOTE: There is a reflexive pattern change associated with this test. One or more orderable or component has been added or removed to the reflexive pattern. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

Ova and Parasite Exam, Fecal (Immunocompromised or Travel History)

3001662, OP FEC

Specimen Requirements:	
Patient Preparation:	Specimens analyzed to determine the efficacy of treatment should be collected three to four weeks after completion of therapy. Antibiotics may affect results of exam.
Collect:	Stool. Recommended collection: 3 separate stool specimens within a 5-7-day period (an individual order must be submitted for each specimen).
Specimen Preparation:	Transfer 2 g of stool within one hour of collection into AlcorFix (ARUP Supply #52059) available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at 800-522-2787. (Min: 1 g) Also acceptable: Transfer 5 g of stool within one hour of collection into both 10 percent formalin and modified PVA (10 g total). (Min: 10 g total) Additional specimen collection instructions can be found at https://www.aruplab.com/parasep~~.~~
Transport Temperature:	Room temperature.
Unacceptable Conditions:	Rectal swabs, unpreserved~~. Multiple specimens (more than one in 24 hours). Unpreserved specimens. Specimens preserved in~~ SAF (sodium acetate formalin), and any PVA fixative containing mercury such as LV-PVA (low viscosity PVA). Multiple specimens collected within a 24 hour period.~~)~~. Specimens containing barium, bismuth, or urine.
Remarks:	Indicate suspected parasites.
Stability:	Ambient: 9 months; Refrigerated: 9 months; Frozen: Unacceptable
Methodology:	Qualitative Concentration/Trichrome Stain/Microscopy
Performed:	Sun-Sat
Reported:	3-7 days
Note:	For ova and parasite exams from nonstool sources, refer to Ova and Parasite Exam, Body Fluid or Urine (ARUP test code 3001663). For Cryptosporidium, Cyclospora, and Cystoisospora stains, refer to Parasitology Stain by Modified Acid-Fast (ARUP test code 0060046). For macroscopic parasite identification

	(worms or proglottids), refer to Parasite Examination, Macroscopic (ARUP test code 2007361). For additional test information refer to ARUP Consult, https://arupconsult.com/content/diarrhea
CPT Codes:	87177; 87209
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Method for identification of ova and parasites includes wet mount and trichrome stain.

Due to the various shedding cycles of many parasites, three separate stool specimens collected over a 5-7-day period are recommended for ova and parasite examination. A single negative result does not rule out the possibility of a parasitic infection. The ova and parasite exam does not specifically detect *Cryptosporidium*, *Cyclospora*, *Cystoisospora*, and Microsporidia. For additional test information refer to ARUP Consult, https://arupconsult.com/content/diarrhea

Reference Interval:

Negative

TEST CHANGE

Hepatitis Panel, Acute with Reflex to HBsAg Confirmation and Reflex to HCV by Quantitative NAAT

3002989, HEPACUTEQR

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube (SST), lavender (EDTA) or pPink (K2EDTA).
Specimen Preparation:	Separate serum from cells ASAP or within 2 hours of collection. Transfer 3.0 mL serum or plasma to an ARUP standard transport tube~~Standard Transport Tube.~~ (Min: 2.5 mL).~~0 mL) Also acceptable: K2EDTA plasma.~~ This test requires a dedicated transport tube submitted only for HEPACUTEQR testing.
Transport Temperature:	Frozen.
Unacceptable Conditions:	Heparinized plasma. Specimens containing particulate material. Heat-inactivated, severely hemolyzed, or lipemic specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 12 hours; Refrigerated: 6~~5~~ days; Frozen: 2 months (avoid freeze/thaw cycles)
Methodology:	Qualitative Chemiluminescent Immunoassay (CLIA)/Quantitative Polymerase Chain Reaction (PCR~~Transcription-Mediated Amplification (TMA~~)
Performed:	Sun-Sat
Reported:	1-2 days
Note:	Preferred~~Order this~~ panel to evaluate symptomatic patients for viral hepatitis. If ~~when the patient has had clinical~~ acute hepatitis C virus (~~of unknown origin for less than six months. If results for HBsAg are repeatedly reactive with an index value between 1.00 and 50.00, then HBsAg Confirmation will be added. If the anti-~~HCV) infection~~ antibody result~~ is suspected, the recommended test is~~positive, then~~ Hepatitis C Virus (HCV) by Quantitative NAAT (3000572). This panel includes hepatitis A virus (HAV) IgM, hepatitis B virus (HBV) core antibody IgM, HBV surface antigen, and HCV antibody with reflex to HCV by quantitative nucleic acid amplification (NAAT).~~will be added.~~

~~Additional charges apply.~~

CPT Codes:	80074; if reflexed, add 87341, and 87522
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Component	Interpretation
Hepatitis C Antibody by CIA Interp	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

Reference Interval:

Test Number	Components	Reference Interval
	Hepatitis B Surface Antigen	Negative
	Hepatitis C Antibody by CIA Interp	Negative
	Hepatitis B Core Antibody, IgM	Negative
	Hepatitis A Antibody, IgM	Negative

TEST CHANGE

Multiple Endocrine Neoplasia Type 2 (MEN2), RET Sequencing

3004572, MEN2 NGS

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender or pink (EDTA) or yellow (ACD solution A or B). New York State Clients: Lavender (EDTA)
Specimen Preparation:	Transport 3 mL whole blood. (Min: 2 mL) New York State Clients: 5 mL (Min: 3~~2~~ mL)
Transport Temperature:	Refrigerated
Unacceptable Conditions:	Serum or plasma; grossly hemolyzed or frozen specimens; saliva, buccal brush, or swab; FFPE tissue.
Remarks:	
Stability:	Ambient: 72 hours; Refrigerated: 2 weeks; Frozen: Unacceptable New York State Clients: Ambient: 24 hours; Refrigerated: 1 week; Frozen: Unacceptable
Methodology:	Massively Parallel Sequencing
Performed:	Varies
Reported:	10-15 days
Note:	Gene Tested: RET (NM_020975)
CPT Codes:	81406
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:	
By report	

TEST CHANGE

Familial Targeted Sequencing

3005867, FAM NGS

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender or pink (EDTA) or yellow (ACD solution A or B). New York State Clients: ARUP cannot facilitate testing for New York patients. Please work directly with a New York-approved laboratory.
Specimen Preparation:	Transport 2 mL whole blood. (Min: 1 mL)
Transport Temperature:	Refrigerated
Unacceptable Conditions:	Serum or plasma; grossly hemolyzed or frozen specimens; saliva, buccal brush, or swab; FFPE tissue.
Remarks:	Documentation of the familial gene variant from a relative's laboratory test report is required to perform testing. Testing will begin upon receipt of all necessary components, including an original laboratory report detailing the familial variant(s) to be tested. DNA extraction will be performed upon sample receipt to ensure stability. DNA Extract and Hold (ARUP test 3005714) will be added by ARUP. A DNA extraction fee will only be charged once per sample.
Stability:	Ambient: 72 hours; Refrigerated: 2 weeks; Frozen: Unacceptable
Methodology:	Massively Parallel Sequencing
Performed:	Varies
Reported:	14-21 days
Note:	Documentation of the familial gene variant from a relative's laboratory test report is required to perform testing. Testing will begin upon receipt of all necessary components, including an original laboratory report detailing the familial variant(s) to be tested.
CPT Codes:	81403
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

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

Counseling and informed consent are recommended for genetic testing. Consent forms are available online

Reference Interval:

By report

HOTLINE NOTE: There is a reflexive pattern change associated with this test. One or more orderable or component has been added or removed to the reflexive pattern. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

Rapid Whole Genome Sequencing

3005935, RWGS NGS

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender or pink (EDTA). Peripheral blood required. Contact ARUP's genetic counselor at 800-242-2787 ext. 2141 prior to test submission. Refer to Rapid Whole Genome Sequencing, Familial Control (ARUP test code 3005928) or Rapid Whole Genome Sequencing, Familial Control with Report (ARUP test code 3005933) for parental specimen requirements. Rapid Whole Genome Sequencing requires two parental controls ordered using either of the test codes above. Testing will not be approved if 3 specimens (proband, 2 parental controls) are not received with associated orders. New York State Clients: ARUP cannot facilitate testing for New York patients. Please work directly with a New York-approved laboratory.
Specimen Preparation:	Transport 2 mL whole blood. (Min: 0.5 mL) Refer to Rapid Whole Genome Sequencing, Familial Control (ARUP test code 3005928) or Rapid Whole Genome Sequencing, Familial Control with Report (ARUP test code 3005933) for parental specimen requirements.
Transport Temperature:	Refrigerated. Refer to Rapid Whole Genome Sequencing, Familial Control (ARUP test code 3005928) or Rapid Whole Genome Sequencing, Familial Control with Report (ARUP test code 3005933) for parental specimen requirements.
Unacceptable Conditions:	
Remarks:	Testing will not be approved if 3 total specimens (proband, 2 parental controls) are not received with associated orders.
Stability:	Ambient: 72 hours; Refrigerated: 1 week; Frozen: Unacceptable
Methodology:	Massively Parallel Sequencing
Performed:	Varies
Reported:	5-7 days
Note:	This test is not orderable on proband only. Familial (parental) controls are required for analysis. The ability to identify causative variant(s) for the patient's presentation is strongly influenced by the quality of the clinical information required.

CPT Codes:	81425; per familial comparator, 81426 is added
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: By report	

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

TEST CHANGE

Angelman Syndrome and Prader-Willi Syndrome by Methylation-Specific MLPA

3006247, AS-PWS DD

Specimen Requirements:	
Patient Preparation:	
Collect:	For Nonfetal Specimens: Lavender (EDTA), pink (K2EDTA)~~), or yellow (ACD solution A)~~ For Fetal Specimens: Two T-25 flasks at 80 percent confluent of cultured amniocytes AND Maternal Whole Blood Specimen: Lavender (EDTA), pink (K2EDTA), or yellow (ACD solution A) Fetal Specimens will require MCC-FETAL testing to be added on by ARUP, and additional charges will apply. New York State Clients: Whole blood Lavender (EDTA) or yellow (ACD) OR 20 mL (min 10 mL) amniotic fluid OR 2 T-25 flasks confluent cultured cells
Specimen Preparation:	For Nonfetal Specimens: Transport 3 mL whole blood (Min: 1mL) For Fetal Specimens: Cultured Amniocytes: Fill flasks with culture media. Transport two T-25 flasks at 80 percent confluent of cultured amniocytes filled with culture media. Backup cultures must be retained at the client's institution until testing is complete. If ARUP receives a sample below the minimum confluence, CG GRW&SND (0040182) will be added on by ARUP, and additional charges will apply. If clients are unable to culture specimens, CG GRW&SND should be added to initial order. Maternal Whole Blood Specimen: Transport 3 mL whole blood (Min: 1 mL) New York State Clients: Specimen must be received at performing laboratory within 72 hours. Do not send to ARUP Laboratories. For direct submission instructions please contact ARUP Referral Testing at (800) 242-2787, ext. 5145.
Transport Temperature:	For Nonfetal Specimens: Whole Blood: Refrigerated. Also acceptable: Ambient. For Fetal Specimens: Cultured Amniocytes: CRITICAL ROOM TEMPERATURE. Must be received within 48 hours of shipment due to viability Maternal Whole Blood Specimen: Refrigerated. Also acceptable: Ambient.
Unacceptable Conditions:	For Nonfetal Specimens: Transfused whole blood, severely hemolyzed whole blood, heparinized whole blood, frozen whole blood.
Remarks:	New York State Clients: Informed consent is required with submission.
Stability:	For Nonfetal Specimens: Whole Blood: Room temperature: 1

	week; Refrigerated: 1 month; Frozen: unacceptable. For Fetal Specimens: Cultured Amniocytes: Room temperature: 48 hours; Refrigerated: Unacceptable; Frozen: Unacceptable Maternal Whole Blood Specimen: Room temperature: 1 week; Refrigerated: 1 month; Frozen: Unacceptable. New York State Clients: Ambient: 4 days; Refrigerated: 4 days; Frozen: Unacceptable
Methodology:	Qualitative /Methylation-Specific Multiplex Ligation-Dependent Probe Amplification (MS-MLPA)
Performed:	Varies
Reported:	12-14 days
Note:	
CPT Codes:	81331; for fetal specimens add 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:

BACKGROUND INFORMATION: Angleman Syndrome and Prader-Willi Syndrome by Methylation-Specific MLPA

Characteristics of Angelman Syndrome (AS): Developmental delays by 6-12 months of age, seizures, microcephaly, movement or balance disorder, minimal or absent speech, and a distinctive behavioral phenotype, which includes a happy demeanor with frequent laughter, hand flapping, and excitability.
Characteristics of Prader-Willi Syndrome (PWS): Neonatal hypotonia, hyperphagia, obesity, global developmental delay, mild intellectual disability, hypogonadism, and a distinctive behavioral phenotype, which includes temper tantrums, stubbornness, manipulative behavior, and obsessive-compulsive behavior.
Prevalence: 1 in 15,000 for AS; 1 in 15,000 for PWS.
Inheritance: Varies, depending on the molecular genetic mechanism.
Cause: AS: Absence of maternal expression of the UBE3A gene. PWS: Absence of the paternally contributed PWS/AS critical region of chromosome 15q11.2-q13.
Molecular Genetic Mechanisms: AS: Microdeletions in the AS/PWS critical region (68 percent), UBE3A mutations (11 percent), paternal uniparental disomy of chromosome 15 (7 percent), imprinting center defects (3 percent), unbalanced chromosome translocation (less than 1 percent), and unknown (10 percent). PWS: Microdeletions in the PWS/AS critical region (70-75 percent), maternal uniparental disomy of chromosome 15 (25-29 percent), imprinting center defect or balanced chromosome translocation (less than 1 percent).
Clinical Sensitivity: PWS: Over 99 percent. AS: 80 percent.
Methodology: Methylation-specific multiplex ligation probe amplification (MLPA) of the AS/PWS critical region of chromosome 15q11.2-q13.
Analytical Sensitivity and Specificity: 99 percent for AS and PWS.
Limitations: Disease mechanisms causing AS that do not alter methylation patterns will not be

detected. Diagnostic errors can occur due to rare sequence variations. This assay is not validated to detect increased copy number of 15q11.2-q13 nor determine parent of origin for duplications. This assay cannot distinguish between uniparental disomy (UPD) or an imprinting defect for PWS or AS. AS and PWS mosaicism will not be assessed by this assay. Interpretation of this test result may be impacted if this patient has had an allogeneic stem cell transplantation. Methylation patterns may not be fully established in early gestation; thus, diagnostic testing on chorionic villus samples is not recommended.

~~This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA -certified laboratory and is intended for clinical purposes.~~

~~Counseling and informed consent are recommended for genetic testing. Consent forms are available online.~~

Reference Interval:

TEST CHANGE

Prenatal Hepatitis Panel

3006343, PRENAT HEP

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube (SST). Also acceptable: ~~Pink (K2EDTA) and~~ Lavender (EDTA) or pink (K2EDTA).
Specimen Preparation:	Separate from cells ASAP or within 2 hours of collection. Transfer 3 mL serum or plasma to an ARUP standard transport tube~~.~~ (Min: 2.5~~0~~ mL)~~.)~~
Transport Temperature:	Frozen
Unacceptable Conditions:	Specimen: Body fluids other than serum or plasma. Condition: Heparinized plasma. Specimens containing particulate material or obvious microbial contamination. Heat-inactivated, severely hemolyzed, or lipemic specimens.
Remarks:	
Stability:	After separation from cells: Ambient: 24 hours; Refrigerated: 6~~5~~ days; Frozen: 2 months (avoid freeze/thaw cycles)
Methodology:	Qualitative Chemiluminescent Immunoassay (CLIA)/Quantitative Polymerase Chain Reaction (PCR~~Transcription-Mediated Amplification (TMA~~)
Performed:	Sun-Sat
Reported:	1-4 days
Note:	Order this test only for prenatal specimens. If results for HBsAg screen are reactive (>= 1.0), then HBsAg Confirmation, Prenatal will be added. Additional charges apply. If the anti-HCV screening result is low positive or high positive, the Hepatitis C Virus (HCV) by Quantitative NAAT will be added. Additional charges apply. This test requires a dedicated transport tube submitted only for PRENAT HEP testing.
CPT Codes:	87340; 86803; if reflexed, add 87341; 87522
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

This test should not be used for blood donor screening, associated reentry protocols, or for screening human cells, tissues, and cellular- and tissue-based products (HCT/P).

Components	Interpretation
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

Reference Interval:

Test Number	Components	Reference Interval
	Hepatitis C Antibody by CIA Interp	Negative
	Hepatitis B Surface Antigen, Prenatal	Negative
	Hepatitis B Surface Antigen, Prenatal	
	Hepatitis B Surface Antigen, Prenatal	

TEST CHANGE

Whole Genome Sequencing

3016493, WGS NGS

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender (EDTA) or pink (EDTA). Peripheral blood required. Contact ARUP's genetic counselor at 800-242-2787 ext. 2141 prior to test submission. Refer to Whole Genome Sequencing, Familial Control (ARUP test code 3016497) for parental specimen requirements. Two parental controls are recommended for optimal whole genome analysis. Submit comparator samples within 7 days of the probands sample. New York State Clients: ARUP cannot facilitate testing for New York patients. Please work directly with a New York-approved laboratory.
Specimen Preparation:	Transport 2 mL whole blood. (Min: 1.0 mL) Refer to Whole Genome Sequencing, Familial Control (ARUP test code 3016497) for parental specimen requirements.
Transport Temperature:	Refrigerated. Refer to Whole Genome Sequencing, Familial Control (ARUP test code 3016497) for parental specimen requirements.
Unacceptable Conditions:	
Remarks:	~~When ARUP is requested to initiate preauthorization,~~ DNA extraction will be performed on the proband and comparator samples upon receipt to ensure ~~sample~~ stability. ~~(~~DNA Extract and Hold ~~(,~~ ARUP test ~~code~~ 3005714~~),~~ will be added to each sample by ARUP. A~~, additional charges apply). The cost of~~ DNA extraction fee will only be charged once per sample~~is credited when genome sequencing is performed~~.
Stability:	Ambient: 72 hours; Refrigerated: 1 week; Frozen: Unacceptable
Methodology:	Massively Parallel Sequencing
Performed:	Varies
Reported:	14-21 days
Note:	The ability to identify causative variant(s) for the patient's presentation is strongly influenced by the quality of the clinical information provided.

CPT Codes:	81425; per familial comparator, 81426 is added
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:

Test Number	Components	Reference Interval

HOTLINE NOTE: There is a reflexive pattern change associated with this test. One or more orderable or component has been added or removed to the reflexive pattern. Refer to the Hotline Test Mix for interface build information.

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

TEST CHANGE

Whole Genome Sequencing, Familial Control

3016497, WGS FRPT

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender (EDTA) or pink (EDTA). Peripheral blood required. Contact ARUP's genetic counselor at 800-242-2787 ext. 2141 prior to test submission. New York State Clients: ARUP cannot facilitate testing for New York patients. Please work directly with a New York-approved laboratory.
Specimen Preparation:	Transport 2 mL whole blood. (Min: 1.0 mL)
Transport Temperature:	Refrigerated
Unacceptable Conditions:	
Remarks:	This test is used for parental control samples associated with a proband sample submitted for whole genome sequencing~~Whole Genome Sequencing~~ (ARUP test code 3016493). Submit comparator samples within 7 days of the probands sample. If a report for a parental control sample is desired, indicate opt-in status for ~~the American College of Medical Genetics and Genomics (~~ACMG~~)~~ secondary findings on the whole genome sequencing intake form (additional charges apply). ~~When ARUP is requested to initiate preauthorization,~~ DNA extraction will be performed on the proband and comparator samples upon receipt to ensure ~~sample~~ stability. ~~(~~DNA Extract and Hold ~~(,~~ ARUP test ~~code~~ 3005714~~),~~ will be added to each sample by ARUP. A~~, additional charges apply). The cost of~~ DNA extraction fee will only be charged once per sample~~is credited when genome sequencing is performed~~.
Stability:	Ambient: 72 hours; Refrigerated: 1 week; Frozen: Unacceptable
Methodology:	Massively Parallel Sequencing
Performed:	Varies
Reported:	14-21 days
Note:	Parental samples are used to aid in interpretation of the proband's genome sequencing data. Please indicate on the whole genome sequencing intake form if a report of American College of Medical Genetics and Genomics (ACMG) secondary findings is desired for submitted parental controls (additional

	charges apply). Please list the name/DOB for parental controls on the whole genome sequencing intake form.
CPT Codes:	NA
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:	

HOTLINE NOTE: There is a reflexive pattern change associated with this test. One or more orderable or component has been added or removed to the reflexive pattern. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

Exome Sequencing

3016583, EXOME PRO

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender or pink (EDTA) or yellow (ACD solution A or B). Peripheral blood required. Contact ARUP's genetic counselor at 800-242-2787 ext. 2141 prior to test submission. Refer to EXOME FRPT (ARUP test code 3016589) for parental specimen requirements. Two parental controls are recommended for EXOME PRO. Controls~~These~~ should be ordered using EXOME FRPT (ARUP ~~the~~ test code 3016589) and submitted within 7 days of the probands sample. ~~above.~~ New York State Clients: ARUP cannot facilitate testing for New York patients. Please work directly with a New York-approved laboratory.
Specimen Preparation:	Transport 2mL whole blood (Min 1.0mL) Refer to EXOME FRPT (ARUP test code 3016589) for parental specimen requirements.
Transport Temperature:	Refrigerated. Refer to EXOME FRPT (ARUP test code 3016589) for parental specimen requirements.
Unacceptable Conditions:	
Remarks:	DNA extraction will be performed on the proband and comparator samples upon receipt to ensure stability. DNA Extract and Hold (ARUP test 3005714) will be added to each sample by ARUP. A DNA extraction fee will only be charged once per sample.
Stability:	Ambient: 72 hours; Refrigerated: 1 week; Frozen: Unacceptable
Methodology:	Massively Parallel Sequencing
Performed:	Varies
Reported:	21-28 days
Note:	The ability to identify causative variant(s) for the patient's presentation is strongly influenced by the quality of the clinical information provided.
CPT Codes:	81415: per familial comparator, 81416 is added
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:

N/A

HOTLINE NOTE: There is a reflexive pattern change associated with this test. One or more orderable or component has been added or removed to the reflexive pattern. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

Exome Sequencing, Familial Control

3016589, EXOME FRPT

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender or pink (EDTA) or yellow (ACD solution A or B). Peripheral blood required. Contact ARUP's genetic counselor at 800-242-2787 ext. 2141 prior to test submission New York State Clients: ARUP cannot facilitate testing for New York patients. Please work directly with a New York-approved laboratory.
Specimen Preparation:	Transport 2 mL whole blood. (Min: 1.0 mL)
Transport Temperature:	Refrigerated
Unacceptable Conditions:	
Remarks:	This test is used for parental control samples associated with a proband sample submitted for EXOME PRO. Submit comparator samples within 7 days of the probands sample. If a report for a parental control sample is desired, indicate opt-in status for ACMG secondary findings on the exome sequencing intake form (additional charges apply). DNA extraction will be performed on the proband and comparator samples upon receipt to ensure stability. DNA Extract and Hold (ARUP test 3005714) will be added to each sample by ARUP. A DNA extraction fee will only be charged once per sample.
Stability:	Ambient: 72 hours; Refrigerated: 1 week; Frozen: Unacceptable
Methodology:	Massively Parallel Sequencing
Performed:	Varies
Reported:	21-28 days
Note:	Parental samples are used to aid in interpretation of the proband's exome sequencing data. Please indicate on the exome sequencing intake form if a report of American College of Medical Genetics and Genomics (ACMG) secondary findings is desired for submitted parental controls (additional charges apply). Please list the name/DOB for parental controls on the exome sequencing intake form.

CPT Codes:	NA
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: N/A	

HOTLINE NOTE: There is a reflexive pattern change associated with this test. One or more orderable or component has been added or removed to the reflexive pattern. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

HPV Primary Screen by PCR With Reflex to Cytology

3016636, HPV PRMRY

Specimen Requirements:	
Patient Preparation:	
Collect:	~~Cervical or endocervical specimen with SurePath collection kit.~~ Cervical or endocervical specimen with brush or spatula from ThinPrep collection kit (ARUP supply #41785 ThinPrep (Vial and Broom) or #51369 ThinPrep (Vial, Brush and Spatula)) available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at 800-522-2787.
Specimen Preparation:	Place collection device in corresponding ~~SurePath or~~ ThinPrep media vial.
Transport Temperature:	Refrigerated
Unacceptable Conditions:	Bloody or dark brown specimens. Specimens in any media other than indicated above.
Remarks:	
Stability:	~~SurePath - Ambient: 1 month; Refrigerated: 6 months; Frozen: Unacceptable ThinPrep -~~ Ambient: 6 months; Refrigerated: 6 months; Frozen: Unacceptable
Methodology:	Qualitative Polymerase Chain Reaction (PCR)
Performed:	Tue-Sat
Reported:	1-5 days
Note:	For cervical sources, a negative high-risk HPV result does not exclude the possibility of future cytologic abnormalities, underlying CIN2-3, or cancer.
CPT Codes:	87624; if reflexed add 88142; if reviewed by pathologist add 88141
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:

This test amplifies DNA of HPV16, HPV18 and 12 other high-risk HPV types (31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, and 68) associated with cervical cancer and its precursor lesions. Sensitivity may be affected by specimen collection methods, stage of infection, and the presence of interfering

substances. Results should be interpreted in conjunction with other available laboratory and clinical data. A negative high-risk HPV result does not exclude the presence of other high-risk HPV types, the possibility of future cytologic abnormalities, underlying CIN2-3, or cancer.

HPV testing should not be used for screening or management of atypical squamous cells of undetermined significance (ASCUS) in women under age 21.

Reference Interval:

Negative

HOTLINE NOTE: There is a reflexive pattern change associated with this test. One or more orderable or component has been added or removed to the reflexive pattern. Refer to the Hotline Test Mix for interface build information.

TEST CHANGE

Lupus Anticoagulant Reflex Panel

3017009, LUPUS RFLX

Specimen Requirements:	
Patient Preparation:	
Collect:	Light blue (sodium citrate). Refer to Specimen Handling at aruplab.com for hemostasis/thrombosis specimen handling guidelines.
Specimen Preparation:	Transfer 3 mL platelet-poor plasma to an ARUP standard transport tube. (Min: 2 mL)
Transport Temperature:	CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered.
Unacceptable Conditions:	Serum. EDTA plasma, clotted or hemolyzed specimens.
Remarks:	
Stability:	Ambient: 4 hours; Refrigerated: Unacceptable; Frozen at -20 C or below: 3 months
Methodology:	Electromagnetic Mechanical Clot Detection/Chromogenic Assay
Performed:	Sun-Sat
Reported:	1-3 days
Note:	If PTT-LA Ratio and dRVVT Screen Ratio are normal, then no further testing is performed. If either the PTT-LA Ratio or dRVVT Screen Ratio are elevated, then Anti-Xa Qualitative Interpretation is added. If PTT-LA Ratio is elevated, then Thrombin Time is also added. If Anti-Xa Qualitative Interpretation is Present and Thrombin Time is greater than 30 seconds~~elevated~~, then Hepzyme treatment is added. If PTT-LA Ratio is Normal and Anti-Xa Qualitative Interpretation is Present, or Thrombin Time is greater than 30 seconds,~~Abnormal~~ and Anti-Xa Qualitative Interpretation is Not Present, or Thrombin Time is lessa than 30 seconds,~~Normal~~ and Anti-Xa Qualitative Interpretation is Present, then DOAC-Stop treatment is added. If either Hepzyme or DOAC-Stop treatment is added, then Neutralized PTT-LA Ratio and/or Neutralized dRVVT Screen Ratio are added. If dRVVT Screen Ratio is elevated in the absence of Hepzyme or DOAC-Stop, or if Neutralized dRVVT Screen Ratio is elevated, then dRVVT 1:1

	Mix Ratio and dRVVT Confirmation Ratio are added. If PTT-LA Ratio is elevated in the absence of Hepzyme or DOAC-Stop treatment, or if Neutralized PTT-LA Ratio is elevated, then Hexagonal Phospholipid Confirmation is added. Additional charges apply.
CPT Codes:	85610; 85613; 85730; if reflexed, additional CPT codes may apply: 85520; 85525; 85598; 85613; 85670; 85730.
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Reference Interval:

Test Number	Components	Reference Interval
	Prothrombin Time (PT)	12.0-15.5 seconds
	PTT-LA Ratio	≤ 1.20
	dRVVT Screen Ratio	≤ 1.20
	Anti-Xa Qualitative Interpretation	Not Present
	Thrombin Time (TT)	≤ 19.5 seconds
	Anticoagulant Medication Neutralization	Not Performed
	Neutralized PTT-LA Ratio	≤ 1.20
	Neutralized dRVVT Screen Ratio	≤ 1.20
	dRVVT 1:1 Mix Ratio	≤ 1.20
	dRVVT Confirmation Ratio	≤ 1.20
	Hexagonal Phospholipid Confirmation	≤ 7.9

TEST CHANGE

Thrombotic Risk Reflex Panel

3017156, THROMRISK

Specimen Requirements:	
Patient Preparation:	Fasting preferred. Refer to Specimen Handling at aruplab.com for hemostasis/thrombosis specimen handling guidelines.
Collect:	Four light blue (sodium citrate) AND two lavender (EDTA) AND two serum separator tubes (SSTs). Also acceptable in place of one of the serum separator tubes (SSTs): green (sodium or lithium heparin) or EDTA (K2 or K3).
Specimen Preparation:	One serum separator tube (SST), green (sodium or lithium heparin) or EDTA (K2 or K3) must be centrifuged and serum or plasma separated within 1 hour of collection. Transfer 1 mL centrifuged serum or plasma to ARUP standard transport tube and label centrifuged tube for homocysteine testing. (Min: 0.5 mL) AND Transfer 2 mL serum into 2 ARUP standard transport tubes, label as serum. (Min: 0.5 mL/tube) AND Transfer 7.5 mL platelet poor plasma prepared from the sodium citrate tubes to 5 ARUP standard transport tubes, label as sodium citrate. (Min: 1 mL/tube) AND Transfer 3 mL lavender whole blood to 2 ARUP standard transport tubes. (Min: 1 mL/tube)
Transport Temperature:	Light blue (sodium citrate): CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Lavender whole blood and serum, green (sodium or lithium heparin) or EDTA (K2 or K3): Frozen.
Unacceptable Conditions:	Specimens collected in any tube type not listed above.
Remarks:	
Stability:	Light blue (sodium citrate): Ambient: Unacceptable; Refrigerated: Unacceptable; Frozen: 2 weeks Lavender whole blood: Ambient: 7 days; Refrigerated: 1 week; Frozen: 1 month Serum: Ambient: 2 hours; Refrigerated: 1 week; Frozen: 2 weeks Green (sodium or lithium heparin) or EDTA (K2 or K3): Ambient: 4 days; Refrigerated: 1 month; Frozen: 10 months
Methodology:	Electromagnetic Mechanical Clot Detection/Chromogenic Assay/Quantitative Enzymatic Assay/Semi-Quantitative Enzyme-Linked Immunosorbent Assay (ELISA)/Polymerase Chain Reaction (PCR)/Fluorescence Monitoring/Microlatex Particle-Mediated Immunoassay
Performed:	Varies

Reported:	2-7 days
Note:	Testing will include Antithrombin, Enzymatic (Activity) (0030010); Protein S Free, Antigen (0098894); Protein C, Functional (0030113); Beta-2 Glycoprotein 1 Antibodies, IgG and IgM (0050321); Cardiolipin Antibodies, IgG and IgM (0099344); Lupus Anticoagulant Reflex Panel (3017009); Prothrombin (F2) c.*97G>A (G20210A) Pathogenic Variant (0056060); APC Resistance Profile with Reflex to Factor V Leiden (0030192); and Homocysteine, Total (0099869). If APC resistance is low, or if a valid result cannot be obtained for the APC portion of the profile, then Factor V Leiden by PCR will be added. Additional charges apply. For the Lupus Anticoagulant Reflex Panel (3017009) portion of the panel, if PTT-LA Ratio and dRVVT Screen Ratio are normal, then no further clot-based testing is performed. If either the PTT-LA Ratio or dRVVT Screen Ratio are elevated, then Anti-Xa Qualitative Interpretation is added. If PTT-LA Ratio is elevated, then Thrombin Time is also added. If Anti-Xa Qualitative Interpretation is Present and Thrombin Time is greater than 30 seconds~~elevated~~, then Hepzyme treatment is added. If PTT-LA Ratio is normal and Anti-Xa Qualitative Interpretation is Present, or Thrombin Time is greater than 30 seconds,~~abnormal~~ and Anti-Xa Qualitative Interpretation is Not Present, or Thrombin Time is less than 30 seconds,~~normal~~ and Anti-Xa Qualitative Interpretation is Present, then DOAC-Stop treatment is added. If either Hepzyme or DOAC-Stop treatment is added, then Neutralized PTT-LA Ratio and/or Neutralized dRVVT Screen Ratio are added. If dRVVT Screen Ratio is elevated in the absence of Hepzyme or DOAC-Stop, or if Neutralized dRVVT Screen Ratio is elevated, then dRVVT 1:1 Mix Ratio and dRVVT Confirmation Ratio are added. If PTT-LA Ratio is elevated in the absence of Hepzyme or DOAC-Stop treatment, or if Neutralized PTT-LA Ratio is elevated, then Hexagonal Phospholipid Confirmation is added. Additional charges apply. False elevations of plasma or serum homocysteine may occur if the plasma or serum is not promptly separated from the cells at the time of collection.
CPT Codes:	81240; 83090; 85300; 85303; 85306; 85307; 85610; 85613; 85730; 86147x2; 86146x2; if reflexed, additional CPT codes may apply: 81241; 85520; 85525; 85598; 85613; 85670; 85730.
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Refer to individual components.
Reference Interval:
Refer to individual components.

TEST CHANGE

Antiphospholipid Syndrome Reflex Panel

3017157, ANTI PHOS

Specimen Requirements:	
Patient Preparation:	
Collect:	Light blue (sodium citrate) AND serum separator tube (SST). Refer to Specimen Handling at aruplab.com for hemostasis/thrombosis specimen handling guidelines.
Specimen Preparation:	Transport 2 mL platelet poor plasma in an ARUP standard transport tube. (Min: 2 mL) AND transport 1 mL serum in an ARUP standard transport tube. (Min: 0.6 mL)
Transport Temperature:	Plasma: CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered. Serum: Frozen.
Unacceptable Conditions:	For Lupus Anticoagulant Reflexive Panel (Plasma): Serum. EDTA plasma, clotted or hemolyzed specimens. For cardiolipin and beta-2 glycoprotein antibodies (serum): Plasma and other body fluids, heat-inactivated, hemolyzed, lipemic, or contaminated specimens.
Remarks:	
Stability:	Plasma: Ambient: 4 hours; Refrigerated: Unacceptable; Frozen at -20 or below: 3 months Serum: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)
Methodology:	Electromagnetic Mechanical Clot Detection/Chromogenic Assay/Semi-Quantitative Enzyme-Linked Immunosorbent Assay (ELISA)
Performed:	Sun-Sat
Reported:	1-3 days
Note:	Testing will include Beta-2 Glycoprotein 1 Antibodies, IgG and IgM (0050321); Cardiolipin Antibodies, IgG and IgM (0099344); and Lupus Anticoagulant Reflex Panel (3017009). For the Lupus Anticoagulant Reflex Panel (3017009) portion of the panel, if PTT-LA Ratio and dRVVT Screen Ratio are normal, then no further clot-based testing is performed. If either the PTT-LA Ratio or dRVVT Screen Ratio are elevated, then Anti-Xa Qualitative Interpretation is added. If PTT-LA Ratio is elevated, then Thrombin Time is also added. If Anti-Xa Qualitative

	Interpretation is Present and Thrombin Time is greater than 30 seconds~~elevated~~, then Hepzyme treatment is added. If PTT-LA Ratio is normal and Anti-Xa Qualitative Interpretation is Present, or Thrombin Time is greater than 30 seconds,~~abnormal~~ and Anti-Xa Qualitative Interpretation is Not Present, or Thrombin Time is less than 30 seconds,~~normal~~ and Anti-Xa Qualitative Interpretation is Present, then DOAC-Stop treatment is added. If either Hepzyme or DOAC-Stop treatment is added, then Neutralized PTT-LA Ratio and/or Neutralized dRVVT Screen Ratio are added. If dRVVT Screen Ratio is elevated in the absence of Hepzyme or DOAC-Stop, or if Neutralized dRVVT Screen Ratio is elevated, then dRVVT 1:1 Mix Ratio and dRVVT Confirmation Ratio are added. If PTT-LA Ratio is elevated in the absence of Hepzyme or DOAC-Stop treatment, or if Neutralized PTT-LA Ratio is elevated, then Hexagonal Phospholipid Confirmation is added. Additional charges apply.
CPT Codes:	85610; 85613; 85730; 86147x2; 86146x2; if reflexed, additional CPT codes may apply: 85520; 85525; 85598; 85613; 85670; 85730.
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data: See individual components.	
Reference Interval:	

TEST CHANGE

PD-L1 22C3 by IHC

3017615, PDL1 22C3

Specimen Requirements:	
Patient Preparation:	
Collect:	Tumor tissue
Specimen Preparation:	Formalin fixed (10% neutral buffered formalin) and paraffin embedded (FFPE) 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 required), available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at 800-522-2787. (Min: 3 slides) If sending precut slides, do not oven bake.
Transport Temperature:	Room temperature. Also acceptable: Refrigerated. Ship in cooled container during summer months.
Unacceptable Conditions:	Paraffin block with no tumor tissue remaining; specimens fixed in any fixative other than 10% neutral buffered formalin. Decalcified specimens. Specimens with fewer than 100 viable tumor cells.
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. If multiple specimens (blocks or slides) are sent to ARUP, they must be accompanied by one of the following: an order comment indicating that the ARUP pathologist should choose the specimen most appropriate for testing (e.g., "Choose best block"), or individual orders for each sample submitted. A Pathologist Block Selection Fee (ARUP test code 3002076) will be added to orders that utilize the first option. If multiple specimens are sent to ARUP without a request for pathologist block/slide selection or individual orders, they will be held until clarification is provided.
Stability:	Paraffin block: Ambient indefinitely, Refrigerated indefinitely, Frozen: Unacceptable Precut NSCLC slides: Ambient 6 months, Refrigerated 6 months, Frozen: Unacceptable Precut gastric/GEJ adenocarcinoma slides: Ambient: 5 months, Refrigerated 5 months, Frozen: Unacceptable Precut ESCC slides: Ambient 1 month, Refrigerated 4.5 months, Frozen: Unacceptable Precut cervical cancer slides: Ambient 1 month, Refrigerated 5 months, Frozen: Unacceptable Precut HNSCC

	slides: Ambient 4 months, Refrigerated 6 months, Frozen: Unacceptable Precut TNBC slides: Ambient 4 months, Refrigerated 7.5 months, Frozen: Unacceptable
Methodology:	Immunohistochemistry (IHC)
Performed:	Mon-Fri
Reported:	3-7 days
Note:	This test code includes pathologist interpretation. At least 100 viable tumor cells are required for interpretation. Submission of slides that have been oven baked, or specimens that are decalcified and/or fixed in any fixative other than 10% neutral buffered formalin are not validated and should be interpreted with caution.
CPT Codes:	88360
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Refer to report.	
Reference Interval:	

HOTLINE NOTE: There is a reflexive pattern change associated with this test. One or more orderable or component has been added or removed to the reflexive pattern. Refer to the Hotline Test Mix for interface build information.

NEW TEST – Available Now

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Treponema pallidum, HSV-1 and HSV-2 by PCR

3017665, GUDPPCR TH

Specimen Requirements:	
Patient Preparation:	
Collect:	Genital, anal, or rectal swabs with APTIMA Unisex Swab Specimen Collection kit (ARUP supply #28907) OR in Viral Transport Media (ARUP supply #12884) available online through eSupply using ARUP Connect, or contact ARUP Client Services at 800-522-2787.
Specimen Preparation:	APTIMA Swab: Place blue swab in swab specimen transport tube, break shaft off at score line, then recap tube. Swab in Viral Transport Media (VTM): Transfer swab to viral transport media.
Transport Temperature:	Frozen
Unacceptable Conditions:	Serum, plasma
Remarks:	Specimen source required
Stability:	Ambient: 3 days; Refrigerated: 1 month; Frozen: 1 month
Methodology:	Qualitative Polymerase Chain Reaction (PCR)
Performed:	Tue, Thu, Sat
Reported:	1-5 days
Note:	This test detects and differentiates Treponema pallidum, Herpes simplex virus 1, and Herpes simplex virus 2.
CPT Codes:	87529 x2, 87798
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

A negative result does not rule out the presence of PCR inhibitors in the patient specimen or test-specific nucleic acid in concentrations below the level of detection by this assay.

Reference Interval:

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

NEW TEST

Click for Pricing

Antimicrobial Susceptibility - Helicobacter pylori

3017744, MA HPYL

Specimen Requirements:	
Patient Preparation:	
Collect:	Actively growing Helicobacter pylori isolate in pure culture.
Specimen Preparation:	Transport sealed container with isolate in pure culture on Brucella or Brain heart infusion slant or in frozen glycerol stock. Place each specimen in individually sealed bag.
Transport Temperature:	Room temperature
Unacceptable Conditions:	Mixed cultures or nonviable organisms
Remarks:	Isolate identification and specimen source required.
Stability:	Ambient: 72 hours; Refrigerated: Unacceptable; Frozen: 7 days
Methodology:	Broth Microdilution
Performed:	Sun-Sat
Reported:	5-10 days
Note:	The following agents are available for testing: amoxicillin, clarithromycin, levofloxacin, rifabutin, tetracycline. For better recovery, submit isolate as soon as possible. An additional processing fee will be billed for all organisms not submitted in pure culture, as indicated in the specimen requirements.
CPT Codes:	87186
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Susceptibility testing is performed by broth microdilution using custom-made MIC panels and interpreted according to CLSI guidelines.	
Reference Interval:	
Susceptible, intermediate, or resistant	

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

NEW TEST

Click for Pricing

Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgG (CSF) With Reflex to Type 1 and 2 Glycoprotein G-Specific Ab, IgG

3017747, HERPR CSF

Specimen Requirements:	
Patient Preparation:	
Collect:	CSF
Specimen Preparation:	Transfer 1 mL CSF to an ARUP standard transport tube. (Min: 0.5 mL)
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Specimen types other than CSF. Contaminated, heat-inactivated, or hemolyzed specimens.
Remarks:	
Stability:	
Methodology:	
Performed:	Sun-Sat
Reported:	1-2 days
Note:	If HSV 1/2 IgG, CSF is greater than or equal to 1.10 IV , then HSV 1 gG-specific IgG, CSF and HSV 2 gG-specific IgG, CSF will be added. Additional charges apply.
CPT Codes:	86694; if reflexed, add 86695; 86696
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:

Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgG, CSF	0.89 IV or less: Negative. No significant level of detectable HSV IgG antibody. 0.90-1.09 IV: Equivocal. Questionable presence of IgG antibodies. Repeat testing in 10-14 days may be helpful. 1.10 IV

	or greater: Positive. IgG antibody to HSV detected which may indicate a current or past HSV infection.	

Reference Interval:

0.89 IV or less

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

NEW TEST

Click for Pricing

TORCH Antibodies IgM

3017749, TORCH IGM

Specimen Requirements:	
Patient Preparation:	
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 2 mL serum to an ARUP standard transport tube. (Min: 1 mL) Parallel testing is preferred and convalescent specimens must be received within 30 days from receipt of the acute specimens.
Transport Temperature:	Refrigerated
Unacceptable Conditions:	Refer to individual components.
Remarks:	
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)
Methodology:	Semi-Quantitative Chemiluminescent Immunoassay (CLIA)
Performed:	Sun-Sat
Reported:	1-2 days
Note:	This test should not be used for blood donor screening, associated reentry protocols, or for screening human cell, tissues, and cellular- and tissue-based products (HCT/P).
CPT Codes:	86645; 86762; 86778
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Cytomegalovirus Antibody, IgM	29.9 AU/mL or less: Not Detected. 30.0-34.9 AU/mL: Indeterminate. Repeat testing in 10-14 days may be helpful. 35.0

	AU/mL or greater: Detected. IgM antibody to CMV detected, which may indicate a current or recent infection. However, low levels of IgM antibodies may occasionally persist for more than 12 months post infection.	
Rubella Antibody, IgM	19.9 AU/mL or less: Not Detected. 20.0 - 24.9 AU/mL: Indeterminate. Repeat testing in 10-14 days may be helpful. 25.0 AU/mL or greater: Detected. IgM antibody to rubella detected, which may indicate a current or recent infection or immunization.	
Toxoplasma gondii Antibody, IgM	7.9 AU/mL or less: Not Detected. 8.0-9.9 AU/mL: Indeterminate. Repeat testing in 10-14 days may be helpful. 10.0 AU/mL or greater: Detected. Significant level of Toxoplasma gondii IgM antibody detected and may indicate a current or recent infection. However, low levels of IgM antibodies may occasionally persist for more than 12 months post infection.	

Reference Interval:

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

NEW TEST

Click for Pricing

Encephalitis Panel With Reflex to Herpes Simplex Virus Types 1 and 2 Glycoprotein G-Specific Antibodies, IgG, Serum

3017751, ENCEPH-SER

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube.
Specimen Preparation:	Transfer 4.0mL serum to an ARUP standard transport tube. (Min: 2.0mL)
Transport Temperature:	
Unacceptable Conditions:	Refer to individual components. CSF (refer to Encephalitis Panel with Reflex to Herpes Simplex Virus Types 1 and 2 Glycoprotein G-Specific Antibodies, IgG, CSF, ARUP test code 2008916).
Remarks:	
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 month
Methodology:	Semi-Quantitative Enzyme-Linked Immunosorbent Assay (ELISA)/Semi-Quantitative Chemiluminescent Immunoassay (CLIA)
Performed:	Sun-Sat
Reported:	2-6 days
Note:	If HSV 1 and/or 2 IgG is 1.10 IV or greater, then HSV 1 G-specific IgG and HSV 2 G-specific IgG will be added. Additional charges apply.
CPT Codes:	86765 x2; 86735 x2; 86787 x2; 86789; 86788; 86694; if reflexed, add 86695; 86696
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Component	Interpretation
Measles (Rubeola) Antibody, IgG	13.4 AU/mL or less: Negative. No significant level of detectable measles (rubeola) IgG antibody. 13.5-16.4 AU/mL: Equivocal. Repeat testing in 10-14 days may be helpful. 16.5 AU/mL or greater: Positive. IgG antibody to measles (rubeola) detected, which may indicate a current or past exposure/immunization to measles (rubeola).
Measles (Rubeola) Antibody, IgM	0.79 AU or less: Negative. No significant level of IgM antibodies to measles (rubeola) virus detected. 0.80-1.20 AU: Equivocal. Repeat testing in 10-14 days may be helpful. 1.21 AU or greater: Positive. IgM antibodies to measles (rubeola) virus detected. Suggestive of current or recent infection or immunization. However, low levels of IgM antibodies may occasionally persist for more than 12 months post infection or immunization.
Mumps Virus Antibody, IgG	8.9 AU/mL or less: Negative. No significant level of detectable IgG mumps virus antibody. 9.0-10.9 AU/mL: Equivocal. Repeat testing in 10-14 days may be helpful. 11.0 AU/mL or greater: Positive. IgG antibody to mumps virus detected, which may indicate a current or past exposure/immunization to mumps virus.
Mumps Virus Antibody, IgM	0.79 IV or less: Negative. No significant level of detectable IgM

	antibody to mumps virus. 0.80-1.20 IV: Equivocal. Borderline levels of IgM antibody to mumps virus. Repeat testing in 10-14 days may be helpful. 1.21 IV or greater: Positive. Presence of IgM antibody to mumps virus detected, which may indicate a current or recent infection. However, low levels of IgM antibody may occasionally persist for more than 12 months post infection or immunization.
Varicella-Zoster Virus Antibody, IgG	134.9 IV or less: Negative. No significant level of detectable varicella-zoster IgG antibody. 135.0-164.9 IV: Equivocal. Repeat testing in 10-14 days may be helpful. 165.0 IV or greater: Positive. IgG antibody to varicella-zoster detected, which may indicate a current or past varicella-zoster infection.
Varicella-Zoster Virus Antibody, IgM	0.90 ISR or less: Negative. No significant level of detectable varicella-zoster virus IgM antibody. 0.91-1.09 ISR: Equivocal. Repeat testing in 10-14 days may be helpful. 1.10 ISR or greater: Positive. Significant level of detectable varicella-zoster virus IgM antibody. Indicative of current or recent infection. However, low levels of IgM antibodies may occasionally persist for more than 12 months post infection or immunization.
Herpes Simplex Virus Type 1	0.89 IV or less: Not Detected. 0.90-1.09 IV: Indeterminate. Repeat

and/or 2 Antibodies, IgG	testing in 10-14 days may be helpful. 1.10 IV or greater: Detected.
West Nile Virus Antibody, IgG by ELISA, Serum	1.29 IV or less: Negative. No significant level of West Nile virus IgG antibody detected. 1.30-1.49 IV: Equivocal. Questionable presence of West Nile virus IgG antibody detected. Repeat testing in 10-14 days may be helpful. 1.50 IV or greater: Positive. Presence of IgG antibody to West Nile virus detected, suggestive of current or past infection.
West Nile Virus Antibody, IgM by ELISA, Serum	0.89 IV or less: Negative. No significant level of West Nile virus IgM antibody detected. 0.90-1.10 IV: Equivocal. Questionable presence of West Nile virus IgM antibody detected. Repeat testing in 10-14 days may be helpful. 1.11 IV or greater: Positive. Presence of IgM antibody to West Nile virus detected, suggestive of current or recent infection.

Reference Interval:

Test Number	Components	Reference Interval
	West Nile Virus Ab, IgG, Ser	1.29 IV or less
	West Nile Virus Ab, IgM, Ser	0.89 IV or less
	Varicella-Zoster Virus Antibody, IgM	0.90 ISR or less
	Mumps Virus Antibody, IgM	0.79 IV or less
	Measles, Rubeola, Antibody IgM	0.79 AU or less

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

NEW TEST

Click for Pricing

Encephalitis Panel With Reflex to Herpes Simplex Virus Types 1 and 2 Glycoprotein G-Specific Antibodies, IgG, CSF

3017752, ENCEPH-CSF

Specimen Requirements:	
Patient Preparation:	
Collect:	CSF.
Specimen Preparation:	Transfer 5.0mL CSF to an ARUP standard transport tube. (Min: 2.5mL)
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Serum or plasma. Contaminated, heat-inactivated, or hemolyzed specimens.
Remarks:	
Stability:	Ambient: 8 hours; Refrigerated: 2 weeks; Frozen: 1 month
Methodology:	Semi-Quantitative Enzyme-Linked Immunosorbent Assay (ELISA)/Semi-Quantitative Chemiluminescent Immunoassay (CLIA)
Performed:	Sun-Sat
Reported:	4-6 days
Note:	If HSV 1 and/or 2 IgG, CSF is 1.10 IV or greater, then HSV 1 G-specific IgG, CSF and HSV 2 G-specific IgG, CSF will be added. Additional charges apply.
CPT Codes:	86765 x2; 86735 x2; 86787 x2; 86789; 86788; 86694; if reflexed, add 86695; 86696
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:	

Component	Interpretation
Measles (Rubeola) Antibody, IgG, CSF	13.4 AU/mL or less: Negative. No significant level of IgG antibody to measles (rubeola) virus detected. 13.5-16.4 AU/mL: Equivocal. Repeat testing in 10-14 days may be helpful. 16.5 AU/mL or greater: Positive. IgG antibody to measles (rubeola) detected, which may indicate a current or past measles (rubeola) infection.
Measles (Rubeola) Antibody, IgM, CSF	0.79 AU or less: Negative. No significant level of IgM antibodies to measles (rubeola) virus detected. 0.80-1.20 AU: Equivocal. Repeat testing in 10-14 days may be helpful. 1.21 AU or greater: Positive. IgM antibodies to measles (rubeola) virus detected. Suggestive of current or recent infection or immunization. However, low levels of IgM antibodies may occasionally persist for more than 12 months post infection or immunization.
Mumps Virus Antibody IgG, CSF	8.9 AU/mL or less: Negative. No significant level of detectable IgG mumps virus antibody. 9.0-10.9 AU/mL: Equivocal. Repeat testing in 10-14 days may be

	helpful. 11.0 AU/mL or greater: Positive. IgG antibody to mumps virus detected, which may indicate a current or past mumps virus infection.	
Mumps Virus Antibody IgM, CSF	0.79 IV or less: Negative. No significant level of detectable IgM antibody to mumps virus. 0.80-1.20 IV: Equivocal. Borderline levels of IgM antibody to mumps virus. Repeat testing in 10-14 days may be helpful. 1.21 IV or greater: Positive. Presence of IgM antibody to mumps virus detected, which may indicate a current or recent infection. However, low levels of IgM antibody may occasionally persist for more than 12 months post infection or immunization.	
Varicella-Zoster Virus Antibody, IgG, CSF	134.9 IV or less: Negative. No significant level of IgG antibody to varicella-zoster virus detected. 135.0-164.9 IV: Equivocal. Repeat testing in 10-14 days may be helpful. 165.0 IV or greater: Positive. IgG antibody to varicella-zoster virus detected, which may indicate a current or past varicella-	

	zoster infection.
Varicella-Zoster Virus Antibody, IgM by ELISA (CSF)	0.90 ISR or less: Negative. No significant level of IgM antibody to varicella-zoster virus detected. 0.91-1.09 ISR: Equivocal. Repeat testing in 10-14 days may be helpful. 1.10 ISR or greater: Positive. Significant level of IgM antibody to varicella-zoster virus detected, which may indicate current or recent infection. However, low levels of IgM antibodies may occasionally persist for more than 12 months post infection.
Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgG, CSF	0.89 IV or less: Negative. No significant level of detectable HSV IgG antibody. 0.90-1.09 IV: Equivocal. Questionable presence of IgG antibodies. Repeat testing in 10-14 days may be helpful. 1.10 IV or greater: Positive. IgG antibody to HSV detected which may indicate a current or past HSV infection.
West Nile Virus Antibody, IgG by ELISA, CSF	1.29 IV or less: Negative. No significant level of West Nile virus IgG antibody detected. 1.30-1.49 IV: Equivocal. Questionable presence of West Nile virus IgG

	antibody detected. Repeat testing in 10-14 days may be helpful. 1.50 IV or greater: Positive. Presence of IgG antibody to West Nile virus detected, suggestive of current or past infection.	
West Nile Virus Antibody, IgM by ELISA, CSF	0.89 IV or less: Negative. No significant level of West Nile virus IgM antibody detected. 0.90-1.10 IV: Equivocal. Questionable presence of West Nile virus IgM antibody detected. Repeat testing in 10-14 days may be helpful. 1.11 IV or greater: Positive. Presence of IgM antibody to West Nile virus detected, suggestive of current or recent infection.	

Reference Interval:

Test Number	Components	Reference Interval
	West Nile Virus Antibody IgG CSF	1.29 IV or less
	West Nile Virus Antibody IgM CSF	0.89 IV or less
	HSV 1/2 Antibody Screen IgG, CSF	0.89 IV or less
	HSV 1/2 Antibody Screen IgG, CSF	
	Measles, Rubeola, Antibody IgG CSF	16.4 AU/mL or less
	Measles, Rubeola, Antibody IgM CSF	0.79 AU or less
	Mumps Virus Antibody IgG CSF	10.9 AU/mL or less
	Mumps Virus Antibody IgM CSF	0.79 IV or less
	VZV Antibody IgM CSF	0.90 ISR or less

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

NEW TEST

Click for Pricing

CD42b by Immunohistochemistry

3017783, CD42B-IHC

Specimen Requirements:	
Patient Preparation:	
Collect:	Tissue or cells.
Specimen Preparation:	Formalin fix (10 percent neutral buffered formalin) and paraffin embed specimen (cells must be prepared into a cellblock). Protect paraffin block and/or slides from excessive heat. Transport tissue block or 5 unstained (3- to 5-micron thick sections), positively charged slides in a Tissue Transport Kit (ARUP supply #47808 highly recommended) available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at 800-522-2787 (Min: 2 slides). If sending precut slides, do not oven bake.
Transport Temperature:	Room temperature. Also acceptable: Refrigerated. Ship in cooled container during summer months.
Unacceptable Conditions:	Specimens submitted with nonrepresentative tissue type. Depleted specimens.
Remarks:	IMMUNOHISTOCHEMISTRY ORDERING AND SUBMISSION DETAILS: Submit electronic request. If you do not have electronic ordering capability, use an ARUP Immunohistochemistry Stain Form (#32978) with an ARUP client number. For additional technical details, contact ARUP Client Services at 800-522-2787.
Stability:	Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable
Methodology:	Semi-Quantitative Immunohistochemistry (IHC)
Performed:	Mon-Fri
Reported:	1-3 days
Note:	This test is performed as a stain and return (technical) service only.
CPT Codes:	88342

New York DOH Approval Status: This test is New York DOH approved.

Interpretive Data:

Reference Interval:

Test Number	Components	Reference Interval

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

NEW TEST – Available Now

Click for Pricing

Human Papilloma Virus (HPV) High Risk by In Situ Hybridization Stain Only

3017816, SO HR ISH

Specimen Requirements:	
Patient Preparation:	
Collect:	Tissue
Specimen Preparation:	Formalin fix (10 percent neutral buffered formalin) and paraffin embed specimen (cells must be prepared into a cellblock). Protect paraffin block and/or slides from excessive heat. Transport tissue block or 6 unstained (3- to 5-micron thick sections), positively charged slides in a tissue transport kit (ARUP supply #47808). Available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at 800-522-2787. (Min: 4 slides). If sending precut slides, do not oven bake.
Transport Temperature:	Room temperature. Also acceptable: Refrigerated. Ship in cooled container during summer months.
Unacceptable Conditions:	Tissue or cells not processed and placed in a paraffin block; serum, blood or other body fluids; tissue not mounted on positively charged slides. Frozen specimens. Specimens fixed/processed in alternative fixatives (alcohol, Prefer) or heavy metal fixatives (B4 or B5). Decal specimens, fresh tissue or cytospins.
Remarks:	
Stability:	Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable
Methodology:	Semi-Quantitative In situ Hybridization (ISH)
Performed:	Mon-Fri
Reported:	2-5 days
Note:	This test is performed as a stain and return (technical) service only.
CPT Codes:	88365
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Reference Interval:

Test Number	Components	Reference Interval

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

NEW TEST – Available Now

Click for Pricing

Human Papilloma Virus (HPV) Low Risk by In Situ Hybridization Stain Only

3017822, SO LR ISH

Specimen Requirements:	
Patient Preparation:	
Collect:	Tissue
Specimen Preparation:	Formalin fix (10 percent neutral buffered formalin) and paraffin embed specimen (cells must be prepared into a cellblock). Protect paraffin block and/or slides from excessive heat. Transport tissue block or 6 unstained (3- to 5-micron thick sections), positively charged slides in a tissue transport kit (ARUP supply #47808). Available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at 800-522-2787. (Min: 4 slides). If sending precut slides, do not oven bake.
Transport Temperature:	Room temperature. Also acceptable: Refrigerated. Ship in cooled container during summer months.
Unacceptable Conditions:	Tissue or cells not processed and placed in a paraffin block; serum, blood, or other body fluids; tissue not mounted on positively charged slides. Frozen specimens. Specimens fixed/processed in alternative fixatives (alcohol, Prefer) or heavy metal fixatives (B4 or B5). Decal specimens, fresh tissue, or cytospins.
Remarks:	
Stability:	Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable
Methodology:	Semi-Quantitative In situ Hybridization (ISH)
Performed:	Mon-Fri
Reported:	2-5 days
Note:	This test is performed as a stain and return (technical) service only.
CPT Codes:	88365
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:

Test Number	Components	Reference Interval

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

NEW TEST

Click for Pricing

Dihydropyrimidine Dehydrogenase (DPYD) and UPD Glucuronosyltransferase 1A1 (UGT1A1) Genotyping

3017866, DPYDUGT1A1

Specimen Requirements:	
Patient Preparation:	
Collect:	Two tubes of lavender (EDTA), pink (K2EDTA).
Specimen Preparation:	Transport 3 mL whole blood in each tube. (Min: 1 mL in each tube)
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Heparinized specimens. Frozen specimens in glass collection tubes.
Remarks:	
Stability:	Ambient: 72 hours; Refrigerated: 1 week
Methodology:	Polymerase Chain Reaction (PCR)/Fluorescence Monitoring/Fragment Analysis
Performed:	Varies
Reported:	5-10 days
Note:	
CPT Codes:	81232; 81350
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	
Refer to report.	
Reference Interval:	

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

NEW TEST

Click for Pricing

Preeclampsia Risk Assessment (sFlt-1/PlGF Ratio)

3017909, PERA S/P

Specimen Requirements:	
Patient Preparation:	
Collect:	Serum separator tube (SST), plain red, or pink (K2EDTA)
Specimen Preparation:	Allow serum to clot completely at room temperature. Transfer 2 mL serum or plasma (Min: 0.5 mL) to an ARUP standard transport tube.
Transport Temperature:	Preferred transport temp: Refrigerated. Also acceptable: Frozen.
Unacceptable Conditions:	Grossly hemolyzed, lipemic, and/or icteric specimens
Remarks:	
Stability:	Room Temperature: 24 hours; Refrigerated: 1 month; Frozen: 1 month
Methodology:	
Performed:	Sun-Sat
Reported:	1-3 days
Note:	This test should not be used for a woman with a multiple pregnancy (i.e., pregnancy with more than one fetus). This test should also not be used in pregnant women who received intravenous heparin within 24 hours.
CPT Codes:	83520 x2
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

The sFlt-1/PlGF ratio is indicated to be used as an aid in the management of the patient and is a prognostic assay intended to stratify hospitalized patients into two risk groups (low risk and high risk of progression to preeclampsia with severe features within two weeks from presentation).

The clinical cutoff for the sFlt-1/PlGF ratio is 40.

If the result of the ratio is greater than or equal to 40, the pregnant woman would be at high risk for progression to preeclampsia with severe features within 2 weeks.

If the result of the ratio is less than 40, the pregnant woman would be at low risk for progression to preeclampsia with severe features within 2 weeks.

The assay results should only be used in conjunction with information available from clinical evaluations and other standard of care procedures. The test result is not to be used to replace clinical judgment.

Reference Interval:

A sFlt-1/PlGF ratio greater than or equal to 40 is consistent with high risk for progression to preeclampsia with severe features within 2 weeks of presentation.

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

NEW TEST

Click for Pricing

Allergens, Food, Tree Nuts Profile IgE

3017913, TREE NUTS

Specimen Requirements:	
Patient Preparation:	Multiple patient encounters should be avoided.
Collect:	Serum separator tube (SST).
Specimen Preparation:	Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP standard transport tube. (Min: 0.6 mL). For multiple allergen orders refer to "Allergen Specimen Collection Instructions" at www.aruplab.com/testing/resources/specimen.
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Postmortem sample
Remarks:	
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year
Methodology:	Quantitative ImmunoCAP Fluorescent Enzyme Immunoassay
Performed:	Sun-Sat
Reported:	1-3 days
Note:	
CPT Codes:	86003 x9
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Allergen results of 0.10-0.34 kU/L are intended for specialist use as the clinical relevance is undetermined. Even though increasing ranges are reflective of increasing concentrations of allergen-specific IgE, these concentrations may not correlate with the degree of clinical response or skin testing results when challenged with a specific allergen. The correlation of allergy laboratory results with clinical history and in vivo reactivity to specific allergens is essential. A negative test may not rule out clinical allergy or even anaphylaxis.

Reporting Range (reported in kU/L)	Probability of IgE Mediated Clinical Reaction	Class Scoring
Less than 0.10	No significant level detected	0
0.10-0.34	Clinical relevance undetermined	0/1
0.35-0.70	Low	1
0.71-3.50	Moderate	2
3.51-17.50	High	3
17.51-50.00	Very high	4
50.01-100.00	Very high	5
Greater than 100.00	Very high	6

Reference Interval:

Test Number	Components	Reference Interval
	Allergen, Food, Walnut (Juglans spp) IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Chestnut IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Pistachio IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Macadamia Nut IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Hazelnut IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Pecan IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Cashew IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Brazil Nut IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Almond IgE	Less than or equal to 0.34 kU/L

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

NEW TEST

Click for Pricing

Allergens, Food, Fish Profile 2 IgE

3017914, FISH GRP2

Specimen Requirements:	
Patient Preparation:	Multiple patient encounters should be avoided.
Collect:	Serum separator tube (SST).
Specimen Preparation:	Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP standard transport tube. (Min: 0.6 mL). For multiple allergen orders refer to "Allergen Specimen Collection Instructions" at www.aruplab.com/testing/resources/specimen.
Transport Temperature:	Refrigerated
Unacceptable Conditions:	Postmortem samples
Remarks:	
Stability:	After separation from cells: Ambient: 2 days; Refrigerated: 2 weeks; Frozen: 1 year
Methodology:	Quantitative ImmunoCAP Fluorescent Enzyme Immunoassay
Performed:	Sun-Sat
Reported:	1-3 days
Note:	
CPT Codes:	86003 x7
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Allergen results of 0.10-0.34 kU/L are intended for specialist use as the clinical relevance is undetermined. Even though increasing ranges are reflective of increasing concentrations of allergen-specific IgE, these concentrations may not correlate with the degree of clinical response or skin testing results when challenged with a specific allergen. The correlation of allergy laboratory results with clinical history and in vivo reactivity to specific allergens is essential. A negative test may not rule out clinical allergy or even anaphylaxis.

Reporting Range (reported in kU/L)	Probability of IgE Mediated Clinical Reaction	Class Scoring
Less than 0.10	No significant level detected	0
0.10-0.34	Clinical relevance undetermined	0/1
0.35-0.70	Low	1
0.71-3.50	Moderate	2
3.51-17.50	High	3
17.51-50.00	Very high	4
50.01-100.00	Very high	5
Greater than 100.00	Very high	6

Reference Interval:

Test Number	Components	Reference Interval
	Allergen, Food, Codfish IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Catfish IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Halibut IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Salmon IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Trout IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Gulf Flounder IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Tilapia IgE	Less than or equal to 0.34 kU/L

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

NEW TEST

Click for Pricing

Allergens, Food, Crustacean Profile IgE

3017915, CRUSTACEAN

Specimen Requirements:	
Patient Preparation:	Multiple patient encounters should be avoided.
Collect:	Serum separator tube (SST).
Specimen Preparation:	Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP standard transport tube. (Min: 0.4 mL).For multiple allergen orders refer to "Allergen Specimen Collection Instructions" at www.aruplab.com/testing/resources/specimen.
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Postmortem samples.
Remarks:	
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year
Methodology:	Quantitative ImmunoCAP Fluorescent Enzyme Immunoassay
Performed:	Sun-Sat
Reported:	1-3 days
Note:	
CPT Codes:	86003 x4
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Allergen results of 0.10-0.34 kU/L are intended for specialist use as the clinical relevance is undetermined. Even though increasing ranges are reflective of increasing concentrations of allergen-specific IgE, these concentrations may not correlate with the degree of clinical response or skin testing results when challenged with a specific allergen. The correlation of allergy laboratory results with clinical history and in vivo reactivity to specific allergens is essential. A negative test may not rule out clinical allergy or even anaphylaxis

Reporting Range (reported in kU/L)	Probability of IgE Mediated Clinical Reaction	Class Scoring
Less than 0.10	No significant level detected	0
0.10-0.34	Clinical relevance undetermined	0/1
0.35-0.70	Low	1
0.71-3.50	Moderate	2
3.51-17.50	High	3
17.51-50.00	Very high	4
50.01-100.00	Very high	5
Greater than 100.00	Very high	6

Reference Interval:

Test Number	Components	Reference Interval
	Allergen, Food, Crab IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Shrimp IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Crayfish IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Lobster IgE	Less than or equal to 0.34 kU/L

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

NEW TEST

Click for Pricing

Allergens, Food, Mollusks Profile IgE

3017916, MOLLUSKS

Specimen Requirements:	
Patient Preparation:	Multiple patient encounters should be avoided.
Collect:	Serum separator tube (SST).
Specimen Preparation:	Separate serum from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP standard transport tube. (Min: 0.5 mL). For multiple allergen orders refer to "Allergen Specimen Collection Instructions" at www.aruplab.com/testing/resources/specimen.
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Postmortem samples
Remarks:	
Stability:	After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year
Methodology:	Quantitative ImmunoCAP Fluorescent Enzyme Immunoassay
Performed:	Sun-Sat
Reported:	1-3 days
Note:	
CPT Codes:	86003 x5
New York DOH Approval Status:	This test is New York DOH approved.
Interpretive Data:	

Allergen results of 0.10-0.34 kU/L are intended for specialist use as the clinical relevance is undetermined. Even though increasing ranges are reflective of increasing concentrations of allergen-specific IgE, these concentrations may not correlate with the degree of clinical response or skin testing results when challenged with a specific allergen. The correlation of allergy laboratory results with clinical history and in vivo reactivity to specific allergens is essential. A negative test may not rule out clinical allergy or even anaphylaxis.

Reporting Range (reported in kU/L)	Probability of IgE Mediated Clinical Reaction	Class Scoring
Less than 0.10	No significant level detected	0
0.10-0.34	Clinical relevance undetermined	0/1
0.35-0.70	Low	1
0.71-3.50	Moderate	2
3.51-17.50	High	3
17.51-50.00	Very high	4
50.01-100.00	Very high	5
Greater than 100.00	Very high	6

Reference Interval:

Test Number	Components	Reference Interval
	Allergen, Food, Squid IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Clam IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Scallop IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Oyster IgE	Less than or equal to 0.34 kU/L
	Allergen, Food, Octopus IgE	Less than or equal to 0.34 kU/L

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

ARUP LABORATORIES

A nonprofit enterprise of the University of Utah and its Department of Pathology

Inactivations

The following will be discontinued from ARUP's test menu on August 19, 2024
Replacement test options are indicated when applicable.

Test Number	Test Name	Refer to Replacement Test
0050291	Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgG and IgM (Inactive as of 08/19/24)	
0050364	Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgG & IgM (CSF) with Reflex to Type 1 & 2 Glycoprotein G-Specific Ab, IgG (Change effective as of 08/19/24: Refer to 3017747 in the August Hotline)	Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgG (CSF) With Reflex to Type 1 and 2 Glycoprotein G-Specific Ab, IgG (3017747)
0050408	Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgM by ELISA, CSF (Inactive as of 08/19/24)	
0050641	Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgM by ELISA (Inactive as of 08/19/24)	
0050665	TORCH Antibodies, IgM (Change effective as of 08/19/24: Refer to 3017749 in the August Hotline)	TORCH Antibodies IgM (3017749)
0050916	Herpes Simplex Virus Type 1 and/or 2 Antibodies, IgG and IgM with Reflex to Type 1 and 2 Glycoprotein G-Specific Ab, IgG (Inactive as of 08/19/24)	
0060203	Antimicrobial Susceptibility - MBC (Inactive as of 08/19/24)	
0060204	Antimicrobial Susceptibility - Bactericidal Assays (Inactive as of 08/19/24)	
0060846	Antifungal Level, 5-Fluorocytosine (5-FC) (Inactive as of 08/19/24)	

Test Number	Test Name	Refer to Replacement Test
2005903	Special Stain, Alcian Blue with Hyaluronidase (Inactive as of 08/19/2024)	
2008915	Encephalitis Panel with Reflex to Herpes Simplex Virus Types 1 and 2 Glycoprotein G-Specific Antibodies, IgG, Serum (Change effective as of 08/19/24: Refer to 3017751 in the August Hotline)	Encephalitis Panel with Rflx to Herpes Simplex Virus Types 1 and 2 Glycoprotein G-Specific Antibodies, IgG, Serum (3017751)
2008916	Encephalitis Panel with Reflex to Herpes Simplex Virus Types 1 and 2 Glycoprotein G-Specific Antibodies, IgG, CSF (Change effective as of 08/19/24: Refer to 3017752 in the August Hotline)	Encephalitis Panel with Rflx to Herpes Simplex Virus Types 1 and 2 Glycoprotein G-Specific Antibodies, IgG, CSF (3017752)
2011549	Pentobarbital, Serum or Plasma(Change effective as of 08/19/24: Refer to 2012201)	Barbiturates, Serum or Plasma, Quantitative (2012201)
3001947	Blood Smear with Interpretation (Inactive as of 08/19/24)	