

Effective as of **04/06/2026**

Additional ordering and billing information

[Information when ordering laboratory tests that are billed to Medicare/Medicaid](#)

[Information regarding Current Procedural Terminology \(CPT\)](#)

Test Number	Mnemonic	Test Name	New Test	Test Name Change	Specimen Requirements	Methodology	Note	Interpretive Data	Reference Interval	Component Charting Name	Component Change	Reflex Pattern	Result Type	Ask at Order Prompt	Numeric Map	Unit of Measure	CPT Code	Pricing Change	Inactivation w/ Replacement	Inactivation w/o Replacement
0050028	APO B/A	Apolipoprotein B/A Ratio		x																
0050029	APO B-100	Apolipoprotein B		x				x												
0050030	APO A-1	Apolipoprotein A-1		x																
0097688	BREAKAGE	Chromosome Analysis - Breakage, Fanconi Anemia, Whole Blood			x															
2007578	HIGH MOLE	High Molecular Weight Kininogen (HMWK), Activity																		x

TEST CHANGE

Apolipoprotein B/A Ratio

0050028, APO B/A

Specimen Requirements:

Patient Preparation: ~~Fasting specimen recommended.~~

Collect: Serum separator tube, plasma separator tube, K2EDTA, lithium heparin

Specimen Preparation: Allow ~~serum specimen~~ to clot completely at room temperature. Separate serum or plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL serum or plasma to an ARUP standard transport tube. (Min: 0.5 mL)

Transport Temperature: Refrigerated.

Unacceptable Conditions:

Remarks:

Stability: After separation from cells: Ambient: 24 hours; Refrigerated: 8 days; Frozen: 2 months

Methodology: Quantitative Immunospectrometry

Note:

CPT Codes: 82172 x2

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

Interpretive Data:

The ratio of apolipoprotein B/A can provide an estimate of the risk for major adverse cardiovascular events in adults.

Apolipoprotein B/A Ratio:	
Low Risk:	0.2-0.6
Medium Risk:	0.61-0.9
High Risk:	0.91-5.0

Reference Interval:

Test Number	Components	Reference Interval	
	Apolipoprotein A-1		
		Male	Female
		104-202 mg/dL	108-225 mg/dL
	Apolipoprotein B		
		Male	Female
		66-133 mg/dL	60-117 mg/dL

TEST CHANGE

Apolipoprotein B

0050029, APO B-100

Specimen Requirements:

Patient Preparation: ~~Fasting specimen.~~

Collect: Serum separator tube, plasma separator tube, K2EDTA, lithium heparin

Specimen Preparation: Allow ~~serum specimen~~ to clot completely at room temperature. Separate serum or plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL serum or plasma to an ARUP standard transport tube. (Min: 0.5 mL)

Transport Temperature: Refrigerated.

Unacceptable Conditions:

Remarks:

Stability: After separation from cells: Ambient: 24 hours; Refrigerated: 8 days; Frozen: 2 months

Methodology: Quantitative Immunoturbidimetry

Note: This protein is found in low density lipoprotein.

CPT Codes:

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

Interpretive Data:

A desirable ~~fasting~~ serum Apo B concentration for the prevention of atherosclerotic cardiovascular disease in adults is less than 90 mg/dL. A ~~fasting~~-serum Apo B concentration of 130 mg/dL or greater corresponds to a LDL cholesterol concentration greater than 160 mg/dL and constitutes a risk enhancing factor for atherosclerotic cardiovascular disease in adults.

Reference Interval:

~~Male: 66-133 mg/dL~~

~~Female: 60-117 mg/dL~~

Test Number	Components	Reference Interval	
	Apolipoprotein B		
		Male	Female
		66-133 mg/dL	60-117 mg/dL

TEST CHANGE

Apolipoprotein A-1

0050030, APO A-1

Specimen Requirements:

Patient Preparation: ~~Freshly drawn fasting specimen.~~

Collect: Serum separator tube, plasma separator tube, K2EDTA, lithium heparin.

Specimen Preparation: Allow ~~serum specimen~~ to clot completely at room temperature. Separate serum or plasma from cells ASAP or within 2 hours of collection. Transfer 1 mL serum or plasma to an ARUP standard transport tube. (Min: 0.5 mL)

Transport Temperature: Refrigerated.

Unacceptable Conditions:

Remarks: Separate serum from cells ASAP.

Stability: After separation from cells: Ambient: 24 hours; Refrigerated: 8 days; Frozen: 2 months

Methodology: Quantitative Immunoturbidimetry

Note: This protein is found in high density lipoprotein.

CPT Codes: 82172

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

Interpretive Data:

Reference Interval:

~~Male: 104-202 mg/dL~~

~~Female: 108-225 mg/dL~~

Test Number	Components	Reference Interval	
		Male	Female
	Apolipoprotein A-1		
		104-202 mg/dL	108-225 mg/dL

TEST CHANGE

Chromosome Analysis - Breakage, Fanconi Anemia, Whole Blood

0097688, BREAKAGE

Specimen Requirements:

Patient Preparation:

Collect: Dark green (sodium heparin).

Specimen Preparation: Specimen must be received at performing laboratory within 48 hours of collection. Do not send to ARUP Laboratories. For direct submission instructions, please contact ARUP Referral Testing at 800-242-2787 ext. 5161. Transport 4 mL whole blood. (Min: 4 mL).
Test is not performed at ARUP; separate specimens must be submitted when multiple tests are ordered.

Transport Temperature: Specimen must be sent directly to performing laboratory. Room temperature. Also acceptable: Refrigerated.

Unacceptable Conditions: Clotted specimens.

Remarks: Ordering physician name and NPI number are ~~is~~ required.

Stability: Ambient: 48 hours; Refrigerated: 48 hours; Frozen: Unacceptable

Methodology:

Note: Chromosome breakage study performed by culturing cells in both mitomycin-C (MMC) and diepoxybutane (DEB). These studies involve culturing of living cells; therefore, turnaround times given represent average times, which are subject to multiple variables. A routine Giemsa-banded chromosome analysis is included with breakage analysis.

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

CPT Codes: 88230; add 88249 if performed

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:

Inactivations

The following will be discontinued from ARUP's test menu on **April 6, 2026**

Replacement test options are indicated when applicable.

Test Number	Test Name	Refer to Replacement Test
2007578	High Molecular Weight Kininogen (HMWK), Activity	