

TEST CHANGE

Vitamin A (Retinol), Serum or Plasma

0080525, VIT A

Specimen Requirements:

Patient Preparation: Patient should fast for 12 hours and abstain from alcohol for 24 hours prior to collection.

Collect: Green (sodium or lithium heparin), plasma separator tube, or serum separator tube. Also acceptable: Lavender (EDTA) or pink (K2EDTA).

Specimen Preparation: Separate serum or plasma within 1 hour of collection. Transfer 1 mL serum or plasma to an ARUP Standard Transport Tube immediately. (Min: 0.2 mL) Avoid hemolysis.

Transport Temperature: Refrigerated.

Unacceptable Conditions: Whole blood or body fluids other than serum or plasma.

Remarks:

Stability: After separation from cells: Ambient: unacceptable 3 hours; Refrigerated: 1 month; Frozen: 1 year

Methodology: Quantitative High Performance Liquid Chromatography (HPLC)

Performed: Sun-Sat

Reported: 1-4 days

Note: Serum retinol is typically maintained until hepatic stores are almost depleted. Values greater than 0.30 mg/L represent adequate liver stores, whereas values less than 0.10 mg/L indicate deficiency. Samples that come in contact with plastic tubing or have been exposed to excessive light may show low results. Vitamin A toxicity occurs when retinol concentration exceeds the capacity of retinol binding protein (RBP). Individuals with compromised renal function can retain RBP and may, therefore, have moderate retinol elevations. Drugs which interfere with vitamin A analysis include probucol (Lorelco). This assay does not measure other vitamin A metabolites such as retinaldehyde and retinoic acid.

CPT Codes: 84590

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

Interpretive Data:

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:

Test Number	Components	Reference Interval		
	Vitamin A (Retinol)			
		Age	Reference Interval	
		0-1 month 2	0.18-0.50 mg/L	
		months-12 years	0.20-0.50 mg/L	
		13-17 years 18	0.26-0.70 mg/L	
		years and older	0.30-1.20 mg/L	
	Vitamin A (Retinyl Palmitate)	0-150 years: 0-0.10 mg/L		