

TEST CHANGE

Catecholamines Fractionated, Plasma

0080216, CATE PF

Specimen Requirements:

Patient Preparation: Patient should be calm and seated for 15 minutes prior to collection. Alternately, patient may be calm and supine for 30 minutes prior to collection. Drugs and medications may affect results and should be discontinued for 72 hours prior to specimen collection, if possible.

Collect: Green (sodium or lithium heparin), lavender (EDTA). Collect on ice.

Specimen Preparation: Specimen should be centrifuged and frozen within one hour (refrigerated centrifuge is preferred but not required). Transfer 3 mL plasma to an ARUP standard transport tube (Min: 1.1 mL)

Transport Temperature: CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered.

Unacceptable Conditions: Serum or urine.

Remarks:

Stability: After separation from cells: Ambient: Unacceptable; Refrigerated: Unacceptable; Frozen at -20 C: 1 month; Frozen at -70 C: 1 year

Methodology: Quantitative High Performance Liquid Chromatography-Tandem Mass Spectrometry

Performed: Sun-Sat

Reported: 1-~~5~~4 days

Note: Medications may interfere with catecholamines and metabolites. The effect of drugs on catecholamine results may not be predictable. (N Rifai, A R Horvath, and C Wittwer. Tietz Textbook of Clinical Chemistry and Molecular Diagnostics. Sixth edition. St. Louis, Missouri: Elsevier, 2018; Table 63.9.) For optimum assessment, patient should be supine for 30 minutes prior to specimen collection. Children, particularly those under 2 years of age, often show an elevated catecholamine response to stress.

CPT Codes: 82384

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

Interpretive Data:

Small increases in catecholamines (less than 2 times the upper reference limit) are usually the result of physiological stimuli, drugs, or improper specimen collection. Significant elevation of one or more catecholamines (2 or more times the upper reference limit) can result from a neuroendocrine tumor. Measurement of plasma or urine fractionated metanephrines should be used for assessment of suspected pheochromocytoma or paraganglioma.

Lower catecholamine concentrations are observed in specimens collected from supine adults.

To convert to picograms per milliliter (pg/mL), multiply the reported concentration for dopamine by 0.153, epinephrine by 0.183, and norepinephrine by 0.169

Access complete set of age- and/or gender-specific reference intervals for this test in the ARUP Laboratory Test Directory (aruplab.com).

Supine Reference Intervals	
Dopamine	Less than or equal to 240 pmol/L
Epinephrine	Less than or equal to 265 pmol/L
Norepinephrine	680-3100 pmol/L

Reference Interval:

Test Number	Components	Reference Interval		
	Dopamine			
		18 years and older Seated (15 min)	Less than or equal to 240 pmol/L	
	Epinephrine			
		18 years and older Seated (15 min)	Less than or equal to 330 pmol/L	
	Norepinephrine			
		18 years and older Seated (15 min)	1050-4800 pmol/L	

