

**Reporting Title:** Catecholamine, Endocrine Study, P  
**Performing Location:** Rochester

**Ordering Guidance:**

This test is not the first-tier test for pheochromocytoma, as plasma catecholamine levels may not be continuously elevated. For the recommended first-tier laboratory test for pheochromocytoma, order either:

- PMET / Metanephrines, Fractionated, Free, Plasma
- METAF / Metanephrines, Fractionated, 24 Hour, Urine

Do not perform the test on patients withdrawing from legal or illegal drugs known to cause rebound plasma catecholamine release during withdrawal (see Cautions for additional information).

**Specimen Requirements:**

**Patient Preparation:**

1. Discontinue drugs that release epinephrine, norepinephrine, or dopamine, or hinder their metabolism, for at least 1 week before obtaining the specimen (see Cautions for details). If this is not possible for medical reasons, contact the laboratory and discuss whether a shorter drug-withdrawal period may be possible in a particular case.
2. Unless the purpose of the measurement is drug monitoring, discontinue any epinephrine, norepinephrine, or dopamine injections/infusions for at least 12 hours before specimen draw.
3. The patient must refrain from eating, using tobacco, and drinking caffeinated beverages for at least 4 hours before the specimen is collected.

**Supplies:** Catecholamine tubes containing EDTA-sodium metabisulfite solution (T066) (tubes have a 6-month. expiration time)

**Collection Container/Tube:**

**Preferred:** 10-mL Catecholamine tubes containing EDTA-sodium metabisulfite solution

**Acceptable:** 6-mL Catecholamine tubes containing EDTA-sodium metabisulfite solution

**Submission Container/Tube:** Plastic vial

**Specimen Volume:** 3 mL per collection

**Collection Instructions:**

1. **Drawing from a catheter is required.**
2. Calm the patient by giving complete instructions and reassurance regarding the procedure.
3. Insert an indwelling intravenous catheter. Flush with 3 mL of saline, using positive pressure.
4. Have the patient rest for 30 minutes in the supine position in a quiet room.
5. At the end of the 30 minutes, withdraw and discard a minimum of 3 mL of blood to remove the saline out of the catheter.
6. If provocative sampling (eg, standing specimen) is required, perform provocative maneuver immediately after obtaining supine specimen. Obtain standing specimen immediately.
7. For each specimen, draw blood into the chilled EDTA-sodium metabisulfite 10-mL tube.
8. Specimen must remain at refrigerated temperature during processing and transport.
9. Separate plasma in a refrigerated centrifuge within 30 minutes of draw.
10. Freeze specimen immediately.

Specimen Type	Temperature	Time	Special Container
Plasma EDTA Meta	Frozen	28 days	

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
33862	Norepinephrine, Supine	Numeric	pg/mL	1601-4
33863	Epinephrine, Supine	Numeric	pg/mL	1465-4
33864	Dopamine, Supine	Numeric	pg/mL	95053-5
33865	Norepinephrine, Standing	Numeric	pg/mL	17368-2
33866	Epinephrine, Standing	Numeric	pg/mL	95054-3
33867	Dopamine, Standing	Numeric	pg/mL	95055-0

LOINC® and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

Components:

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
CTP0	Catecholamine, Fract, Supine, P	1	82384	Yes	No
CTP10	Catecholamine, Fract, Standing, P	1	82384	Yes	No

CPT Code Information:

82384 x 2

Reference Values:

NOREPINEPHRINE

Supine: 70-750 pg/mL

Standing: 200-1,700 pg/mL

EPINEPHRINE

Supine: Undetectable-110 pg/mL

Standing: Undetectable-140 pg/mL

DOPAMINE

<30 pg/mL (no postural change)