CATECHOLAMINES, PLASMA (Norepinephrine, Epinephrine, Dopamine)

Orderable - CAT
Turn Around Time: 10 days

**Alternate Name(s):**
- Dopamine
- Epinephrine
- Norepinephrine
- Adrenaline
- Noradrenaline

**Specimen:**
2 x 6 mL Pink (EDTA) top Vacutainer tubes

**Collection Information:**
Patient must refrain from eating, using tobacco and drinking caffeinated beverages for at least 4 hours before the specimen is drawn. Catechol drugs may interfere, including alpha methyl dopa, alpha-methyl-para-tyrosine, isoproteronal, dobutamine, and carbidopa.

Patient must be supine for at least 30 minutes prior to and during specimen collection.

Pre-chill Vacutainers, place on ice immediately after blood collection, and deliver to lab on ice.

7 mL of EDTA plasma are requested. Minimum volume of EDTA plasma required is 5 mL.

**Reference Ranges:**

<table>
<thead>
<tr>
<th>Catecholamine</th>
<th>Range</th>
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<tbody>
<tr>
<td>Norepinephrine</td>
<td>0.5 - 3.1 nmol/L</td>
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<tr>
<td>Epinephrine</td>
<td>&lt; 1.1 nmol/L</td>
</tr>
<tr>
<td>Dopamine</td>
<td>&lt; 0.13 nmol/L</td>
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Note: Higher catecholamine concentrations are observed in specimens collected from upright or standing adults.
Interpretive Comments:

Either steadily or paroxysmally elevated in pheochromocytoma. Antihypertensive medication should be discontinued at least 24 hrs before collection. Vasodilating drugs increase plasma catecholamine levels and some beta blockers cause analytical interference. When feasible, these agents should be withdrawn for 48 hours prior to sampling. This test is highly sensitive for diagnosis of pheochromocytoma during periods of hypertension. Circulating Norepinephrine and Dopamine are marginally increased if patient is on vasodilating drugs. Levels also increased in essential hypertension.

Special Processing:

7 mL of EDTA plasma are requested, separated into 2 aliquots. Minimum volume of EDTA plasma required is 5 mL.

Comments:

Contact:
Endocrinology Laboratory ext. 77676

Storage and Shipment:

Store and ship plasma frozen.