PHENYLALANINE AND TYROSINE, BLOOD SPOT
Test ID: PKUBS

USEFUL FOR: Monitoring effectiveness of dietary therapy in patients with hyperphenylalaninemia.

METHOD: Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)

REFERENCE VALUES:
Phenylalanine 29-95 nmol/mL
Tyrosine 29-149 nmol/ml

SPECIMEN REQUIREMENTS:
Container/Tube: Supplies: Card-Blood Spot Collection (Filter Paper) (T493)
Preferred: Blood Spot Collection Card (T493)
Acceptable: Whatman Protein Saver 903 Paper, Ahlstrom 226 filter paper
Specimen Volume: 2 Blood spots
Minimum Volume: 1 Blood spot
Collection Instructions:
1. Let blood dry on filter paper at room temperature in a horizontal position for 3 or more hours.
2. At least 2 spots should be complete, ie, unpunched.
3. Do not expose specimen to heat or direct sunlight.
4. Do not stack wet specimens.
5. Keep specimen dry.
Additional Information: Dried blood spots collected with EDTA, sodium heparin, lithium heparin, or ACD containing devices are acceptable.

SPECIMEN STABILITY INFORMATION:

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Temperature</th>
<th>Time</th>
<th>Special container</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Blood</td>
<td>Ambient (Preferred)</td>
<td>21 days</td>
<td>FILTER PAPER</td>
</tr>
<tr>
<td></td>
<td>Frozen</td>
<td>10 days</td>
<td>FILTER PAPER</td>
</tr>
<tr>
<td></td>
<td>Refrigerated</td>
<td>10 days</td>
<td>FILTER PAPER</td>
</tr>
</tbody>
</table>

CAUTIONS: The determination of plasma phenylalanine and tyrosine levels is not sufficient follow-up for abnormal newborn screening results, because other causes of hyperphenylalaninemia (eg, tetrahydrobiopterin deficiency) cannot be excluded by this test alone.
This test is not sufficient to establish a diagnosis of hyperphenylalaninemia.

CPT CODE: Phenylalanine-84030; Tyrosine-84510

DAY(S) SET UP: Monday-Friday; 1 p.m. ANALYTIC TIME: 3 days

QUESTIONS: Contact your Mayo Medical Laboratories’ Regional Manager or Nathan Hines, MML Laboratory Technologist Resource Coordinator Telephone: 800-533-1710