# PHENYLALANINE & TYROSINE, BLOOD

## General Information

**Lab Order Codes:** PHTY

**Synonyms:** Phenylketonuria (PKU)

**CPT Codes:**
- 84510 – Tyrosine
- 84030 – Phenylalanine (PKU), blood

**Test Includes:** Phenylalanine and Tyrosine reported in mg/dL

## Logistics

**Test Indications:** Useful in diagnosis of phenylketonuria (PKU) and to monitor phenylalanine and tyrosine levels in PKU patients on low phenylalanine diets.

**Lab Testing Sections:** Serology – Sendouts

**Referred to:** Fairview University Medical Center (Test code: TYPH)

**Phone Numbers:**
- MIN Lab: 612-813-6280
- STP Lab: 651-220-6500

**Test Availability:** Daily, 24 hours and performed on the following schedule at Fairview. All specimens will be processed and held to be run on these days: Mondays and Wednesdays, results are reported the following day.

**Turnaround Time:** 2 – 5 days

**Special Instructions:** N/A

## Specimen

**Specimen Type:** Blood

**Container:** Green top (Li Heparin) tube
Alternate: Green(NaHep or LiHep NO GEL) tube, Lavender top (EDTA) tube or Red top (NO GEL) or filter paper.

**Draw Volume:** 2 mL blood (Minimum: 0.3 mL) or blood absorbed onto filter paper.

**Processed Volume:** 1 mL (Minimum: 0.05 mL) plasma/serum
**Collection:** Routine venipuncture

**Special Processing:** Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into a screw-capped round bottom plastic vial. Store and ship at room temperature. Forward promptly.

**Patient Preparation:** None

**Sample Rejection:** Mislabeled or unlabeled specimens

### Interpretive

#### Reference Range:

**Phenylalanine:**

<table>
<thead>
<tr>
<th>Age:</th>
<th>Result (mg/dL):</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 3 months:</td>
<td>0.0 - 1.9 mg/dL</td>
</tr>
<tr>
<td>4 months – 11 years:</td>
<td>0.1 - 1.4 mg/dL</td>
</tr>
<tr>
<td>&gt; or = 12 years:</td>
<td>0.5 - 1.6 mg/dL</td>
</tr>
</tbody>
</table>

**Tyrosine**

<table>
<thead>
<tr>
<th>Age:</th>
<th>Result (mg/dL):</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 3 months:</td>
<td>0.0 - 2.7 mg/dL</td>
</tr>
<tr>
<td>4 months – 11 years:</td>
<td>0.4 - 1.6 mg/dL</td>
</tr>
<tr>
<td>&gt; or = 12 years:</td>
<td>0.6 - 2.4 mg/dL</td>
</tr>
</tbody>
</table>

**Critical Values:** N/A

**Limitations:** N/A

**Methodology:** High performance ion exchange liquid chromatography.

**References:** [Fairview University Medical Center](https://www.fairview.org) December 2017