Lab Dept: Chemistry

Test Name: PKU DIETARY SCREEN, QUANTITATIVE

**General Information** 

Lab Order Codes: PKUD

**Synonyms:** Amino Acids, Quantitative Dietary Screen

**CPT Codes:** 82139

**Test Includes:** Quantification of 5 Amino Acids and Interpretation of clinical significance.

Logistics

**Test Indications:** Useful in diagnosis of amino acid metablosim defect, which could lead to

disorders such as phenylketonuria (PKU), maple syrup urine disease (MSUD), homocystinuria, glycine encephalopathy, and various urea cycle

defects.

**Lab Testing Sections:** Serology – Sendouts

**Referred to:** Wisconsin State Laboratory of Hygiene (WSLH code: 565)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6500

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 2 - 4 days after receipt of sample, same day if requested. Testing performed

Monday - Friday

**Special Instructions:** N/A

Specimen

**Specimen Type:** Whole blood spotted on filter paper

**Container:** Whatman 904 filter paper

**Draw Volume:** 0.4 mL or blood absorbed onto filter paper.

**Processed Volume:** Same as Draw Volume

**Collection:** Routine venipuncture, 2 dime-sized dried blood spots collected on provided

filter paper. Allow blood specimen to dry for at least 3 hours prior to

transport.

**Special Processing:** Lab Staff: Dry specimen at room temperature 3- 4 hours in horizontal

position. Store and ship at room temperature. Forward to reference lab

within 24 hours of collection.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimens, blood clots, layered blood, incomplete

saturation or insufficient specimen quantity

Interpretive

**Reference Range:** Phenylalanine: 37 – 73 umol/L

Tyrosine: 51 - 115 umol/L

Critical Values: N/A

Critical Values: N/A

Limitations: N/A

**Methodology:** High performance ion exchange liquid chromatography(HPLC)

**References:** Wisconsin State Laboratory of Hygiene (September 2017)