Amino Acid Profile, Quantitative, Plasma

**Test Code:** AA  
**Turnaround time:** 7 days  (STAT results: 1 day.)  
**CPT Codes:** 82139 x1

### Condition Description

Plasma amino acids analysis will detect specific amino acid disorders such as phenylketonuria (PKU), maple syrup urine disease (MSUD), urea cycle defects, non-ketotic hyperglycinemia and homocystinuria, etc. Plasma amino acids values are compared to age-matched normal values. Quantitative analysis of amino acids can also be performed to monitor established patients diagnosed with metabolic disorders.

### Indications

This test is indicated in the case of:

- Infants with a positive newborn screening result indicative of a metabolic disorder.
- Evaluation of patients with signs of a possible metabolic condition, such as lethargy, vomiting, and failure to thrive.
- Monitoring for individuals diagnosed with a metabolic condition.

### Methodology

Quantitative ion exchange chromatography, reported as micromoles/L.

### Detection

This test is very sensitive for specific amino acid disorders, but detection can be sensitive to the clinical and nutritional status of the patient.

### Specimen Requirements

**Type:** Plasma

Specimen Requirements:

In sodium heparin (green top) tube: 1-2 ml

Sample should be collected while fasting or 2-4 hours postprandial.

Centrifuge to separate plasma and freeze.

Specimen Collection and Shipping: Ship frozen sample on dry ice with overnight delivery.

### Special Instructions

Please indicate any medications or dietary changes on the test requisition form.

### Related Tests

- **Organic Acids Quantitative Analysis (OA)** is used in the diagnosis and evaluation of patients with metabolic conditions.