**Lab Dept:** Urine/Stool  
**Test Name:** AMINO ACIDS, QUANTITATIVE RANDOM, URINE

### General Information

**Lab Order Codes:** AAUQR  
**Synonyms:** N/A  
**CPT Codes:** 82139 – Amino acids; 6 or more, quantitative, each specimen  
**Test Includes:** Alanine, Allo-Isoleucine, α-Aminoadipic Acid, α-Amino-n-butyric Acid, Arginine, Argininosuccinic Acid, Asparagine, Aspartic Acid, β-Alanine, β-Aminoisobutyric Acid, Anserine, Carnosine, Citrulline, Cystathionine, Cystine, Ethanolamine, Gamma-Amino-n-butyric Acid, Glutamic Acid, Glutamine, Glycine, Histidine, Homocitrulline, Hydroxylysine, Hydroxyproline, Isoleucine, Leucine, Lysine, Methionine, 1-Methylhistidine, 3-Methylhistidine, Ornithine, Phenylalanine, Phosphethanolamine, Phosphoserine, Proline, Sarcosine, Serine, Taurine, Threonine, Tryptophan, Tyrosine, Valine reported in nmol/mg creatinine.

### Logistics

**Test Indications:** Inborn errors of amino acid metabolism can manifest themselves at anytime in a person’s life, but most become evident in infancy and early childhood.

Affected persons may have failure to thrive, neurological symptoms, digestive problems, locomotor retardation, and a wide spectrum of laboratory findings.

If not diagnosed promptly and treated properly, these disorders can result in poor growth, mental retardation, and death.

Amino acid analysis may also have clinical importance in the evaluation of several acquired conditions, including endocrine disorders, liver diseases, muscle diseases, neoplastic diseases, neurological disorders, nutritional disturbances, renal failure, and burns.

**Lab Testing Sections:** Urine/Stool - Sendouts  
**Referred to:** Mayo Medical Laboratories (Test: AAPD)  
**Phone Numbers:** MIN Lab: 612-813-6280  
STP Lab: 651-220-6550  
**Test Availability:** Daily, 24 hours
### Turnaround Time:
3 – 4 days, test set up Monday – Friday

### Special Instructions:
**Note:** Provide clinical history, clinical condition (asymptomatic or acute), diet, and drug therapy.

### Specimen

**Specimen Type:** Random urine

**Container:** 13 mL urine tube, screw-capped

**Draw Volume:** 2 mL (Minimum: 1 mL) urine

**Processed Volume:** Same as Draw Volume

**Collection:** Random urine collection, void or catheterized

**Special Processing:** Lab Staff: A well mixed aliquot should be placed into a screw-capped round bottom plastic vial. Store and ship at frozen temperatures. Forward promptly.

**Patient Preparation:** None

**Sample Rejection:** Warm specimens; mislabeled or unlabeled specimens

### Interpretive

**Reference Range:** Reference ranges are provided with the report

**Critical Values:** N/A

**Limitations:** N/A

**Methodology:** Liquid chromatography-tandem Mass Spectrometry (LC-MS/MS)

**References:** [Mayo Medical Laboratories](https://mayo.medערךقطعت.png) October 2012

**Updates:**
- 10/31/2012: Addition of the following: Phosphoserine, Phosphoethanolamine, Hydroxyproline, Aspartic Acid, Ethanolamine, Sarcosine, Arginosuccinic Acid, Anserine, Homocitrulline, Gamma Amino-n-butyric Acid, Hydroxlysine, Tryptophan, Allo-isoleucine