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**Lab Dept:** Urine/Stool

**Test Name:** AMINO ACIDS, QUANTITATIVE RANDOM, URINE

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**General Information**

**Lab Order Codes:** AAUQR

**Synonyms:** N/A

**CPT Codes:** 82139 – Amino acids; 6 or more, quantitative, each specimen

**Test Includes:** Taurine, threonine, serine, asparagine, hydroxyproline, glutamic acid, glutamine, aspartic acid, ethanolamine, sarcosine, proline, glycine, alanine, citrulline, alpha-aminoadipic acid, alpha-amino-n-butyric acid, valine, cystine, cystathionine, methionine, isoleucine, leucine, tyrosine, phenylalanine, beta-alanine, beta-aminoisobutyric acid, ornithine, lysine, 1-methylhistidine, histidine, 3-methylhistidine, argininosuccinic acid, allo-isoleucine, homocitrulline, gamma-amino-n-butyric acid, hydroxylysine, tryptophan, and arginine. reported in nmol/mg creatinine.

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**Logistics**

**Test Indications:** Evaluating patients with possible inborn errors of metabolism using random urine specimens.

May aid in evaluation of endocrine disorders, liver diseases, muscle diseases, neoplastic diseases, neurological disorders, nutritional disturbances, kidney failure, and burns

**Lab Testing Sections:** Urine/Stool - Sendouts

**Referred to:** Mayo Clinic Laboratories (Test: AAPD)

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

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 3 – 5 days, test set up Monday – Friday

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

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**Specimen**

**Specimen Type:** Random urine

<b>Container:</b>	Leakproof urine container
<b>Draw Volume:</b>	2 mL (Minimum: 1 mL) urine
<b>Processed Volume:</b>	Same as Draw Volume
<b>Collection:</b>	Random urine collection, void or catheterized
<b>Special Processing:</b>	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.  Specimen stable frozen (preferred) for 70 days, refrigerated for 14 days.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Warm specimens; mislabeled or unlabeled specimens

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### ***Interpretive***

<b>Reference Range:</b>	Reference ranges are provided with the report. See the Mayo catalog for more details.
<b>Critical Values:</b>	N/A
<b>Limitations:</b>	This assay does not measure total homocysteine, phosphoethanolamine, or imidodipeptides. Therefore, this assay should not be used as a test for homocystinuria, hypophosphatasia, and prolidase deficiency. See Additional Testing Requirements and Necessary Information for more information or contact a Mayo biochemical genetics counselor at 800-533-1710.
<b>Methodology:</b>	Liquid chromatography-tandem Mass Spectrometry (LC-MS/MS)
<b>References:</b>	<a href="#">Mayo Clinic Laboratories</a> June 2024
<b>Updates:</b>	3/1/2004: Test moved from Fairview Diagnostic Laboratories to Mayo Medical Laboratories. 1/11/2011: Method update. Units update. 10/31/2012: Addition of the following: Phosphoserine, Phosphoethanolamine, Hydroxyproline, Aspartic Acid, Ethanolamine, Sarcosine, Arginosuccinic Acid, Anserine, Homocitrulline, Gamma Amino-n-butyric Acid, Hydroxylysine, Tryptophan, Allo-isoleucine 6/28/24: Omitted amino acids removed from the panel, added specimen stability.