**Lab Dept:** Urine/Stool  
**Test Name:** CYSTURIA PROFILE, QUANTITATIVE RANDOM URINE

### General Information

**Lab Order Codes:** UCYSR  
**Synonyms:** Cystine, random urine  
**CPT Codes:** 82136 – Amino acids, 2 to 5 amino acids, quantitative, each  
**Test Includes:** Cystine, Lysine, Ornithine, Arginine reported in nmol/mg creatinine

### Logistics

**Test Indications:** Biochemical diagnosis and monitoring of cystinuria. Cystinuria is a disorder of the transport (intestine, kidney tubules) of four amino acids: cystine, lysine, arginine, and ornithine.  
**Lab Testing Sections:** Urine/Stool – Sendouts  
**Referred to:** Mayo Medical Laboratories (Test: CYSR)  
**Phone Numbers:**  
  - MIN Lab: 612-813-6580  
  - STP Lab: 651-220-6550  
**Test Availability:** Daily, 24 hours  
**Turnaround Time:** 3 - 5 days, test set up Monday - Friday  
**Special Instructions:** N/A

### Specimen

**Specimen Type:** Urine, random  
**Container:** Plastic leakproof container  
**Draw Volume:** 2 mL (Minimum: 0.5 mL) urine  
**Processed Volume:** Same as Draw Volume  
**Collection:** Routine urine collection
Special Processing: Lab Staff: Send specimen frozen in a plastic 10 mL urine tube. Forward promptly.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimens

**Interpretive**

Reference Range: **Age/Amino Acid, Random urine** (nmol/mg creatinine)

<table>
<thead>
<tr>
<th></th>
<th>Arginine</th>
<th>Ornithine</th>
<th>Cystine</th>
<th>Lysine</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;=12 mos</td>
<td>10 - 560</td>
<td>&lt;265</td>
<td>12 - 504</td>
<td>19 - 1988</td>
</tr>
<tr>
<td>13 – 35 mos</td>
<td>20 - 395</td>
<td>&lt;70</td>
<td>11 - 133</td>
<td>25 - 743</td>
</tr>
<tr>
<td>3 – 6 yrs</td>
<td>14 - 240</td>
<td>&lt;44</td>
<td>&lt;130</td>
<td>14 - 307</td>
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<td>7 – 8 yrs</td>
<td>&lt;134</td>
<td>&lt;17</td>
<td>&lt;56</td>
<td>17 - 276</td>
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<tr>
<td>9 – 17 yrs</td>
<td>&lt;153</td>
<td>&lt;18</td>
<td>&lt;104</td>
<td>10 - 240</td>
</tr>
<tr>
<td>&gt;=18 yrs</td>
<td>&lt;114</td>
<td>&lt;25</td>
<td>10 - 98</td>
<td>15 - 271</td>
</tr>
</tbody>
</table>

Critical Values: N/A

Limitations: N/A

Methodology: Liquid Chromatography – Tandem Mass Spectrometry (LC-MS/MS)

References: Mayo Medical Laboratories Web Page October 2012

Updates: 10/31/2012: Reference range update.