Lab Dept: Urine/Stool

Test Name: CYSTINURIA PROFILE, QUANTITATIVE URINE

General Information

Lab Order Codes:	UCYQ
Synonyms:	Cystine, Quantitative urine
CPT Codes:	82136 – Amino acids, 2 to 5 amino acids, quantitative, each
Test Includes:	Cystine, Lysine, Ornithine, Arginine reported in mcmol/24 h.

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: 8376/CYSQN)
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:	Collect before intravenous pyelogram. Refrigerate or keep specimen on ice during the entire collection. Note: Starting and ending times are required for a timed urine collection.

Specimen

Specimen Type:	Urine, 24 hour
Container:	Plastic leakproof container, 24 hour
Draw Volume:	5 mL (Minimum: 1 mL) urine from a 24 hour urine collection
Processed Volume:	Same as Draw Volume

Collection: 24 hour collection (required). Refrigerate or keep specimen on ice during the entire collection.

Special Processing: Lab Staff: Mix 24 hour collection well. Measure 24 hour volume and note volume on specimen label. Remove a 5mL aliquot place into a 13 mL urine tube. Send specimen frozen. Forward promptly.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimens

Interpretive

Reference Range:

Cystine (mcmol/24 hours)	
3 – 15 years:	11 – 53
> or = 16 years:	28 – 115
Lysine (mcmol/24 hours)	
3 – 15 years:	19 – 140
> or = 16 years:	32 – 290
Ornithine (mcmol/24 hours)	
3 – 15 years:	3 – 16
> or = 16 years:	5 – 70
Arginine (mcmol/24 hours)	
3 – 15 years:	10 – 25
> or = 16 years:	13 – 66
Conversion formulas	
mcmol/24 hours x 0.24 = result in mg/24 hours	
mg/24 hours x4.17 = result in mcmol/24 hours	

Critical Values: N/A

Limitations: N/A

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

References: Mayo Medical Laboratories Web Page June 2013