
Lab Dept: Urine/Stool

Test Name: ORGANIC ACID SCREEN, RANDOM URINE

General Information

Lab Order Codes: OAUQ

Synonyms: N/A

CPT Codes: 83919 – Organic acids; total, qualitative, each specimen

Test Includes: Screen for organic acids with an interpretive report provided.

Logistics

Test Indications: Diagnosis of inborn errors of metabolism.

Lab Testing Sections: Urine/Stool - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: OAU)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 3 - 6 days, test set-up Monday – Friday

Special Instructions: Provide clinical/family history, clinical condition (asymptomatic or acute episode) diet, drug therapy information. Patient's age is required for specimen processing.

Specimen

Specimen Type: Urine, random collection preferred

Container: Plastic leakproof container (No preservative).

Draw Volume: Submit entire random urine collection

Processed Volume: 10 mL (Minimum: 4 mL) urine

Collection:	A random urine sample may be obtained by voiding into a urine cup and is often performed at the laboratory. Bring the refrigerated container to the lab. Make sure all specimens submitted to the laboratory are properly labeled with the patient's name, medical record number and date of birth.
Special Processing:	Lab staff: Mix urine specimen well before aliquot is taken. Aliquot 10 mL (Minimum: 4 mL) urine. Store in freezer. Ship frozen. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Warm specimens, mislabeled or unlabeled specimens

Interpretive

Reference Range: An interpretive report will be provided.

Critical Values: N/A

Limitations: The diagnostic specificity of organic acid analysis under acute and asymptomatic conditions may vary considerably.

Informative profiles may not always be detected in disorders where the excretion of diagnostic metabolites is a reflection of the residual activity of the defective enzyme, the dietary load of precursors, and the anabolic/catabolic status of a patient.

In some cases, methods of higher specificity and sensitivity such as acylcarnitine determination by tandem mass spectrometry and acylglycine determination by Gas Chromatography/Mass Spectrometry stable isotope dilution analysis can effectively overcome the limitations of standard organic acid analysis for the investigation of non-acutely ill patients.

Methodology: Gas Chromatography-Mass Spectrometry (GC-MS)

References: [Mayo Medical Laboratories Web Page](#) August 2015

Updates: 3/4/2004: Test moved from Fairview Diagnostic Laboratories to Mayo Medical Laboratories. Note: CPT changed from 83918 to 83919.