
Lab Dept: Urine/Stool

Test Name: OXALATE, RANDOM URINE

General Information

Lab Order Codes: OXUR

Synonyms: Oxalate, Urine

CPT Codes: 83945 – Oxalate
82570 – Creatinine, other source

Test Includes: Urine oxalate concentration reported in mmol/L, Urine creatinine reported in mg/dL and Oxalate/Creatinine ratio. See [Special Instructions](#)

Logistics

Test Indications: Monitoring therapy for kidney stones. Identifying increased urinary oxalate as a risk factor for stone formation. Diagnosis of primary or secondary hyperoxaluria.

Lab Testing Sections: Urine/Stool - Sendouts

Referred to: Mayo Clinic Laboratories (MML Test: ROXUR)

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 - Saturday

Special Instructions: A timed 24-hour urine collection is the preferred specimen for measuring and interpreting this urinary analyte. Random collections normalized to urinary creatinine may be of some clinical use in patients who cannot collect a 24-hour specimen, typically small children. Therefore, this random test is offered for children <16 years old.

Specimen

Specimen Type: Urine, random collection

Container: Plastic leakproof container (No preservative)

Draw Volume: Submit an entire random urine collection

Processed Volume:	7 mL (Minimum: 6 mL) urine from a well-mixed random specimen
Collection:	Routine urine collection
Special Processing:	Lab Staff: Mix random specimen well, remove 7 mL (Minimum: 6 mL) from a random urine collection. No preservative. Send specimen in a plastic, 10 mL urine tube or a clean, plastic aliquot container with no metal cap or glued insert. Do NOT attempt to adjust pH as it will adversely affect results. Send specimen refrigerated. Forward promptly. Specimen stable refrigerated (preferred) or frozen for 14 days, ambient for 3 days.
Patient Preparation:	Avoid taking large doses (≥ 2.0 g orally/24 hours) of vitamin C during specimen collection as it may falsely elevate the measured urinary oxalate excretion.
Sample Rejection:	Specimen collected or sent in a container with a metal cap is not acceptable, specimens other than urine, mislabeled or unlabeled specimens

Interpretive

Reference Range:	No reference values are available for random specimens. See reference laboratory test catalog for further interpretive information.
Critical Values:	N/A
Limitations:	Ingestion of ascorbic acid (>2 g/day) may falsely elevate the measured urinary oxalate excretion. Do not collect in metal-capped containers.
Methodology:	OXCO1: Enzymatic Using Oxalate Oxidase CRETR: Enzymatic Colorimetric Assay OXCO3, RAT11: Calculation
References:	Mayo Clinic Laboratories Web Page July 2020
Updates:	1/18/2024: Update to minimum volume.