



Laboratory Service Manual

Lab Dept: Urine/Stool

Test Name: AMINOLEVULINIC ACID, URINE

General Information

Lab Order Codes: UALA

Synonyms: Aminolevulinic Acid (ALA) Urine

CPT Codes: 82135 – Aminolevulinic acid, delta (ALA)

Test Includes: Urine Arylsulfatase A concentration

Logistics

Test Indications: Useful for assistance in the differential diagnosis of the various porphyrias. Indicating lead toxication in children.

Lab Testing Sections: Urine/Stool - Sendouts

Referred to: Mayo Medical Laboratories (test #8406)

Phone Numbers:

Minneapolis: 612-813-6280

Saint Paul: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2-5 days, test set up Tuesday, Wednesday and Friday at 9:00 AM

Special Instructions: Submit an entire 24-hour urine collection. No preservative. **Must** refrigerate specimen during and after collection. Protect specimen from the light.

Note: Starting and ending times of collection are required for a timed urine collection and must be documented electronically or on the proper request form.

Specimen

Specimen Type: Urine, timed

Container: Plastic leakproof container (No preservative). Urine GUARD® collection container is preferred for a timed urine sample.



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- Draw Volume:** Submit an entire 24-hour urine collection
- Processed Volume:** 2 mL (Minimum: 1.0 mL) urine aliquot from a well mixed 24 hour urine collection
- Collection:** For timed urine collections, empty the bladder, discard the voided sample, and note the start time. Collect all urine voided for the specified time period. At the end of the period, note the finishing time, add the last voided sample to the container by emptying the bladder. 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: Measure urine volume. Add 25 ml of 50% acetic acid as preservative. Use 15 ml of 50% acetic acid for children under 5 years old. This preservative is intended to achieve a pH of between approximately 2.0 and 4.0. Remove a 2 mL aliquot of urine and place in an amber 60 mL urine bottle (Mayo Supply T596) to protect the specimen from light. Store and ship the specimen at refrigerated temperatures. Forward promptly.
- The 24 hour volume is required on request form for processing.
- Patient Preparation:** None
- Sample Rejection:** Specimens other than urine

Interpretive

Reference Range:

Age	Range
0 - 8 months:	not established
9 months – 5 years:	0.00 - 0.66 mg/dL
6 years and over:	1.5 - 7.5 mg/24 hours

- Critical Values:** N/A
- Limitations:** N/A
- Methodology:** Colorimetric
- Contraindications:** The differential diagnosis of delta-aminolevulinic aciduria must be considered on the basis of the patient's clinical presentation.
- References:** Davis J, Audelman (1967) S: Urinary delta-aminolevulinic Acid (ALA) levels in lead poisoning. Arch Envir on Health 15:53-59



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