
Lab Dept: Urine/Stool

Test Name: 5 - HIAA, QUANTITATIVE URINE

General Information

Lab Order Codes: HIAA

Synonyms: 5-Hydroxyindoleacetic acid (5-HIAA), Urine; 5-HIAA, 24 hour Urine

CPT Codes: 83497 – Hydroxyindolacetic acid, 5-(HIAA)

Test Includes: Urine 5-HIAA concentration reported in mg/24 hours

Logistics

Test Indications: Biochemical diagnosis and monitoring of intestinal carcinoid syndrome.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: HIAA/9248)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 – 4 days, test is set up Monday - Friday

Special Instructions: A urine collection container **must be** obtained from the laboratory containing Acetic Acid before the start of the collection.

Patients >5 years: Add 25 mL of 50% Acetic Acid to the container

Patients <5 years: Add 15 mL of 50% Acetic Acid to the container

Refrigerate specimen during and after collection.

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.

See [Patient Preparation](#)

Specimen

Specimen Type: Urine, timed collection

Container:	Plastic leakproof container (No preservative). Urine GUARD® collection container is preferred for a timed urine sample.
Draw Volume:	Submit an entire 24-hour urine collection
Processed Volume:	5 mL (Minimum: 1 mL) aliquot from a well mixed 24 hour 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:	<p>Lab Staff: See Special Instructions for Preservative information:</p> <p>Once the refrigerated specimen comes to the lab. Mix the specimen well, record the total specimen volume on the specimen and remove the 5 mL (Minimum: 1 mL) aliquot of urine. Mark the specimen as a 24 hr urine.</p> <p>Send specimen refrigerated in a plastic, 13 mL urine vial.</p> <p>Total volume of collection is required on request form and specimen for processing.</p>
Patient Preparation:	<p>Patient should not eat avocados, bananas, cantaloupe, eggplant, pineapple, plums, tomatoes, hickory nuts, plantain, kiwi, dates, grapefruit, honeydew, melons, nuts, pecans or walnuts for a 48 hour period prior to start of collection.</p> <p>Certain medications such as L-Dopa, acetaminophen, salicylates, and cough syrup containing guaifenesin must be avoided.</p>
Sample Rejection:	Specimen incorrectly processed; specimens other than urine; warm specimen; 24 hour volume not included on request form; unlabeled or mislabeled specimens

Interpretive

Reference Range: Adults: < or = 8 mg/24 hours

Critical Values: N/A

Limitations:

Intake of foodstuff with high content of serotonin within 48 hours of the urine collection could result in falsely elevated 5-HIAA excretion. See [Patient Preparation](#)

Numerous drugs affect the excretion of 5-HIAA by different mechanisms, including increased serotonin synthesis, metabolism, and release, and inhibition of uptake. See [Patient Preparation](#).

Methodology:

Liquid Chromatography – Tandem Mass Spectrophotometry (LC-MS/MS)

References:

[Mayo Medical Laboratories](#) January 2015

Updates:

1/4/2011: Change in reference range. Previously listed as < or = 6 mg/24 hours.