



# Test Definition: SERU

Serotonin, 24 Hour, Urine

**Reporting Title:** Serotonin, 24 Hr, U

**Performing Location:** Mayo Clinic Laboratories - Rochester Superior Drive

### Additional Testing Requirements:

First-line testing for the diagnosis of carcinoid tumors with symptoms suggestive of carcinoid syndrome consists of urinary 5-HIAA (HIAA / 5-Hydroxyindoleacetic Acid, 24 Hour, Urine), and serum chromogranin A (CGAK / Chromogranin A, Serum). Serotonin in whole blood (SERWB / Serotonin, Blood), serum (SER / Serotonin, Serum), and urine (SERU / Serotonin, 24 Hour, Urine) are useful in conjunction with these first-line tests.

### Necessary Information:

**24-Hour volume (in milliliters) is required.**

### Specimen Requirements:

#### Patient Preparation:

1. For 48 hours before and during specimen collection, patient should **not** eat avocados, bananas, butternuts, cantaloupe, dates, eggplant, grapefruit, hickory nuts, honeydew melon, kiwifruit, melon, nuts, pecans, pineapple, plantains, plums, tomatoes, or walnuts, which are high in serotonin or tryptophan.
2. Patient **should not** take medications that may elevate serotonin levels, including lithium, monoamine oxidase inhibitors, methyl dopa, morphine, and reserpine, or selective serotonin reuptake inhibitors (SSRI, eg, PROZAC) which can lead to depletion of platelet serotonin levels and result in false-negative serotonin results for a minimum of 72 hours before specimen collection. Some drugs with longer half-lives (i.e. fluoxetine) can require months after discontinuation for serotonin levels to return to baseline.

**3. Patient should avoid heavy nicotine consumption during the 24-hour collection period.**

**Supplies:** Urine Tubes, 10 mL (T068)

**Container/Tube:** Plastic, 10-mL urine tube

**Specimen Volume:** 5 mL

#### Collection Instructions:

1. Add 25 mL of 50% acetic acid as preservative at start of collection.
2. Collect urine for a full 24 hours (required) and record the total volume.
3. Refrigerate specimen during collection.

**Additional Information:** See [Urine Preservatives-Collection and Transportation for 24-Hour Urine Specimens](#) for multiple collections.

### Forms:

If not ordering electronically, complete, print, and send an [Oncology Test Request](#) (T729) with the specimen.

### Urine Preservative Collection Options:

**Note:** The addition of preservative must occur prior to beginning the collection.

Ambient (no additive)	OK
Refrigerate (no additive)	OK
Frozen (no additive)	OK
50% Acetic Acid	Preferr ed
Boric Acid	No
Diazolidinyl Urea	No

6M Hydrochloric Acid	No
6M Nitric Acid	OK
Sodium Carbonate	No
Thymol	No
Toluene	OK

Specimen Type	Temperature	Time	Special Container
Urine	Refrigerated (preferred)	28 days	
	Ambient	48 hours	
	Frozen	28 days	

**Ask at Order Entry (AOE) Questions:**

Test ID	Question ID	Description	Type	Reportable
SERU	TM80	Collection Duration (h)	Plain Text	Yes
SERU	VL67	Volume (mL)	Plain Text	Yes

**Result Codes:**

Result ID	Reporting Name	Type	Unit	LOINC®
26603	Serotonin, 24 Hr, U	Alphanumeric	mcg/24 h	18253-5
TM80	Collection Duration (h)	Alphanumeric		13362-9
VL67	Volume (mL)	Alphanumeric		3167-4

LOINC® and CPT codes are provided by the performing laboratory.

**Supplemental Report:**

No

**CPT Code Information:**

84260

**Reference Values:**

< or =210 mcg/24 h

Reference values apply to all ages.