
Reporting Title: Vanillylmandelic Acid, 24 Hr, U**Performing Location:** Rochester**Ordering Guidance:**

In the past, this test has been used to screen for pheochromocytoma. However, vanillylmandelic acid (VMA) is not the analyte of choice to rule out a diagnosis of pheochromocytoma. Recommended tests for that purpose include:

- PMET / Metanephrines, Fractionated, Free, Plasma
- METAF / Metanephrines, Fractionated, 24 Hour, Urine
- CATU / Catecholamine Fractionation, Free, 24 Hour, Urine

Necessary Information:

1. Patients age is required.
2. Collection duration and urine volume (in milliliters) are required.
3. All patients receiving L-dopa should be identified to the laboratory when this test is ordered.
4. Bactrim may interfere with detection of the analyte. All patients taking Bactrim should be identified to the laboratory when this test is ordered.

Specimen Requirements:

Patient Preparation: Administration of L-dopa may falsely-increase vanillylmandelic acid results; it should be discontinued 24 hours prior to and during specimen collection.

Supplies: Urine Tubes, 10 mL (T068)

Specimen Volume: 5 mL

Collection Instructions:

1. Collect a 24-hour urine specimen.
2. Add 25 mL of 50% acetic acid as preservative at the start of collection. If specimen is refrigerated during collection, preservative may be added up to 12 hours after collection. Use 15 mL of 50% acetic acid for children <5 years old. This preservative is intended to achieve a pH of between approximately 1 and 5. If necessary, adjust urine pH to a level between 1 and 5 by adding 50% acetic acid or hydrochloric acid dropwise and checking the pH.

Additional Information: For multiple collections see Urine Preservatives-Collection and Transportation for 24-Hour Urine Specimens.

Specimen Minimum Volume:

2 mL

Forms:

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

Urine Preservative Collection Options:

Note: For addition of preservative or application of temperature information, see Specimen Required.

Ambient No

Refrigerate No
Frozen No
50% Acetic Acid Preferred
Boric Acid OK
Diazolidinyl Urea No
6M Hydrochloric Acid OK
6M Nitric Acid OK
Sodium Carbonate No
Thymol No
Toluene No

*If boric acid is used, note on specimen container. Also, verify that pH is in desired range (pH=1-5). If pH is outside of desired range, adjust pH with a stronger acid (acetic acid is preferred but other acids listed above could be used if available) in a dropwise fashion to bring pH into desired range.

| Specimen Type | Temperature | Time | Special Container |
|---------------|--------------------------|----------|-------------------|
| Urine | Refrigerated (preferred) | 28 days | |
| | Frozen | 180 days | |

Ask at Order Entry (AOE) Questions:

| Test ID | Question ID | Description | Type | Reportable |
|---------|-------------|---------------------|------------|------------|
| VMA | TM41 | Collection Duration | Plain Text | Yes |
| VMA | VL39 | Urine Volume | Plain Text | Yes |

Result Codes:

| Result ID | Reporting Name | Type | Unit | LOINC® |
|-----------|-------------------------------------|--------------|---------|---------|
| 3580 | Vanillylmandelic Acid, Adult (>14y) | Alphanumeric | mg/24 h | 3122-9 |
| 3581 | Vanillylmandelic Acid, Child (<15y) | Alphanumeric | mg/g Cr | 30571-4 |
| TM41 | Collection Duration | Alphanumeric | | 13362-9 |
| VL39 | Urine Volume | Alphanumeric | | 3167-4 |

LOINC and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

84585

Reference Values:

<1 year: <25.0 mg/g creatinine
1 year: <22.5 mg/g creatinine
2-4 years: <16.0 mg/g creatinine
5-9 years: <12.0 mg/g creatinine
10-14 years: <8.0 mg/g creatinine
> or =15 years (adults): <8.0 mg/24 hours