



Test Definition: VH

Vanillylmandelic Acid and Homovanillic Acid,
Random, Urine

Reporting Title: VMA and HVA, Random, U

Performing Location: Mayo Clinic Laboratories - Rochester Main Campus

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. Patient's age is required.
2. All patients receiving L-dopa should be identified to the laboratory when this test is ordered.
3. 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 homovanillic acid and vanillylmandelic acid results. For 24 hours prior to specimen collection, the patient should **not** take L-dopa.

Supplies: Urine Tubes, 10 mL (T068)

Collection Container/Tube: Clean, plastic urine collection container

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

Specimen Volume: 5 mL

Collection Instructions:

1. Collect a random urine specimen.
2. Adjust the urine pH to a level between 1 and 5 by adding 50% acetic acid or hydrochloric acid dropwise and checking the pH.

Forms:

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

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

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
2143	Vanillylmandelic Acid, VH	Alphanumeric	mg/g Cr	3124-5
2144	Homovanillic Acid, VH	Alphanumeric	mg/g Cr	11146-8

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

Supplemental Report:

No

CPT Code Information:

83150-HVA

84585-VMA

Reference Values:

Vanillylmandelic acid

<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: <7.0 mg/g creatinine

Homovanillic acid

<1 year: <35.0 mg/g creatinine

1 year: <30.0 mg/g creatinine

2-4 years: <25.0 mg/g creatinine

5-9 years: <15.0 mg/g creatinine

10-14 years: <9.0 mg/g creatinine

> or =15 years: <8.0 mg/g creatinine