

500 Chipeta Way, Salt Lake City, Utah 84108-1221

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Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Patient Age/Sex: 28 years Male

Specimen Collected: 1/31/2025 15:59 MST

VMA and HVA, Random Urine | Received: 1/31/2025 16:00 MST Report/Verified: 1/31/2025 16:01 MST

Procedure	Result	Units	Reference Interval
Creatinine, Urine -per volume	25	mg/dL	
Vanillylmandelic Acid -per volume	2.0	mg/L	
Vanillylmandelic Acid -ratio to CRT	8 ^{# i1}	mg/gCR	[0-6]
Homovanillic Acid -per volume	4.0	mg/L	
Homovanillic Acid -ratio to CRT	16 ^{# i2}	mg/gCR	[0-8]
VMA and HVA Interpretation	See Note ⁱ³		

Test Information

i1: Vanillylmandelic Acid - ratio to CRT
REFERENCE INTERVAL: VMA, Urine mg/g CRT

Access complete set of age- and/or gender-specific reference intervals for this test in the ARUP Laboratory Test Directory (aruplab.com).

i2: Homovanillic Acid - ratio to CRT
REFERENCE INTERVAL: HVA, Urine mg/g CRT

Access complete set of age- and/or gender-specific reference intervals for this test in the ARUP Laboratory Test Directory (aruplab.com).

i3: VMA and HVA Interpretation
INTERPRETIVE INFORMATION: VMA and HVA, Urine

Vanillylmandelic acid (VMA) and homovanillic acid (HVA) results are expressed as a ratio to creatinine excretion (mg/g CRT). No reference interval is available for results reported in units of mg/L. Slight or moderate increases in catecholamine metabolites may be due to extreme anxiety, essential hypertension, intense physical exercise, or drug interactions. Significant increase of one or more catecholamine metabolites (several times the upper reference limit) is associated with an increased probability of a secreting neuroendocrine tumor.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

*=Abnormal, #=Corrected, C=Critical, f=Result Footnote, H-High, i-Test Information, L-Low, t-Interpretive Text, @=Performing lab

Unless otherwise indicated, testing performed at:

ARUP Laboratories

500 Chipeta Way, Salt Lake City, UT 84108

Laboratory Director: Jonathan R. Genzen, MD, PhD

ARUP Accession: 25-031-900154

Report Request ID: 20275776

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