

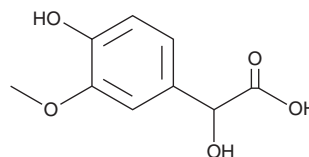
PRODUCT INFORMATION



Vanillylmandelic Acid

Item No. 42992

CAS Registry No.: 55-10-7
Formal Name: α ,4-dihydroxy-3-methoxy-benzeneacetic acid
Synonyms: HMMA, 4-Hydroxy-3-methoxymandelic Acid, ($\pm$)-4-Hydroxy-3-methoxymandelic Acid, DL-4-Hydroxy-3-methoxymandelic Acid, ($\pm$)-Vanillylmandelic Acid, DL-Vanillylmandelic Acid, VMA
MF: $C_9H_{10}O_5$
FW: 198.2
Purity: $\geq 95\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Vanillylmandelic acid is supplied as a solid. A stock solution may be made by dissolving the vanillylmandelic acid in the solvent of choice, which should be purged with an inert gas. Vanillylmandelic acid is slightly soluble (0.1-1 mg/ml) in ethanol and DMSO.

Description

Vanillylmandelic acid is an active metabolite of (-)-norepinephrine (Item No. 16673).¹ It is formed from (-)-norepinephrine via normetanephrine (Item No. 38792) and 4-hydroxy-3-methoxyphenylglycol (Item No. 19714) intermediates by several enzymatic reactions. Vanillylmandelic acid (10 mg/kg) reduces ventricular tachyarrhythmia severity in a rat model of myocardial ischemia injury induced by coronary artery occlusion.² It has been used as a urinary marker for catecholamine-secreting tumors.^{1,3}

References

1. Goldstein, D.S., Eisenhofer, G., and Kopin, I.J. Sources and significance of plasma levels of catechols and their metabolites in humans. *J. Pharm. Exp. Ther.* **305**(3), 800-811 (2003).
2. Kolentinis, M.K., Verginadis, I.I., Simos, Y.V., et al. Vanillylmandelic acid protects against reperfusion injury in an experimental animal model of myocardial infarction. *Pathophysiology* **26**(3-4), 343-347 (2019).
3. Taran, F., Bernard, H., Valleix, A., et al. Competitive enzyme immunoassay for urinary vanillylmandelic acid. *Clin. Chim. Acta* **264**, 177-192 (1997).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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