

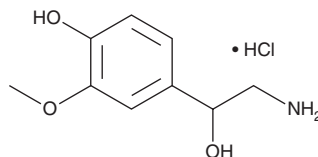
# PRODUCT INFORMATION



## Normetanephine (hydrochloride)

Item No. 38792

**CAS Registry No.:** 1011-74-1  
**Formal Name:**  $\alpha$ -(aminomethyl)-4-hydroxy-3-methoxy-benzenemethanol, monohydrochloride  
**Synonyms:** DL-Normetanephine, ( $\pm$ )-Normetadrenaline, NMN,  $\alpha$ -(aminomethyl)Vanillyl Alcohol  
**MF:**  $C_9H_{13}NO_3 \cdot HCl$   
**FW:** 219.7  
**Purity:**  $\geq 95\%$   
**Supplied as:** A solid  
**Storage:**  $-20^\circ C$   
**Stability:**  $\geq 4$  years



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

### Laboratory Procedures

Normetanephine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the normetanephine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Normetanephine (hydrochloride) is soluble in DMSO. Normetanephine (hydrochloride) is slightly soluble in acetonitrile and water.

### Description

Normetanephine is an active metabolite of norepinephrine.<sup>1-3</sup> It is formed from norepinephrine by catechol-O-methyltransferase (COMT).<sup>1</sup> Normetanephine induces contractions in isolated rabbit aortic strips in a concentration-dependent manner.<sup>2</sup> It inhibits norepinephrine uptake in isolated rat heart ( $IC_{50} = 200 \mu M$ ).<sup>3</sup> Plasma levels of normetanephine are increased in patients with von Hippel-Lindau disease and pheochromocytomas compared with patients with von Hippel-Lindau disease without pheochromocytomas.<sup>4</sup> It has been used as a marker of authentic human urine specimens.<sup>5</sup>

### 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. Pruss, P., Maengwyn-Davies, G.D., and Wurzel, M. Comparison of effects of aromatic sympathomimetic amines on rabbit aortic strip and rabbit blood pressure *J. Pharmacol. Exp. Ther.* **147**, 76-85 (1965).
3. Burgen, A.S. and Iversen, L.L. The inhibition of noradrenaline uptake by sympathomimetic amines in the rat isolated heart. *Br. J. Pharmacol. Chemother.* **25**(1), 34-49 (1965).
4. Eisenhofer, G., Lenders, J.W., Linehan, W.M., et al. Plasma normetanephine and metanephine for detecting pheochromocytoma in von Hippel-Lindau disease and multiple endocrine neoplasia type 2. *N. Engl. J. Med.* **340**(24), 1872-1879 (1999).
5. Goggin, M.M., Tann, C.-M., Miller, A., et al. Catching fakes: New markers of urine sample validity and invalidity. *J. Anal. Toxicol.* **41**(2), 121-126 (2016).

#### 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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