

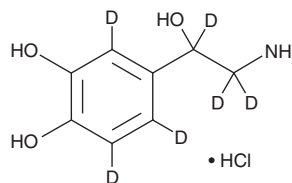
PRODUCT INFORMATION



(±)-Norepinephrine-d₆ (hydrochloride)

Item No. 10842

CAS Registry No.: 1219803-04-9
Formal Name: 4-(2-amino-1-hydroxyethyl-1,2,2- d₃)-1,2-benzene-3,4,6- d₃-diol, monohydrochloride
Synonyms: (±)-Arterenol-d₆, DL-Noradrenaline-d₆, (±)-Noradrenaline-d₆, DL-Norepinephrine-d₆
MF: C₈H₅D₆NO₃ • HCl
FW: 211.7
Chemical Purity: ≥98% ((±)-Norepinephrine)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₆); ≤1% d₀
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

(±)-Norepinephrine-d₆ (hydrochloride) is intended for use as an internal standard for the quantification of norepinephrine (Item No. 35580) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

(±)-Norepinephrine-d₆ (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the (±)-norepinephrine-d₆ (hydrochloride) in the solvent of choice, which should be purged with an inert gas. (±)-Norepinephrine-d₆ (hydrochloride) is slightly soluble in DMSO.

Description

(±)-Norepinephrine is a racemic mixture of the endogenous neurotransmitter (-)-norepinephrine (Item No. 16673) and (+)-norepinephrine. It induces cAMP accumulation in rat cerebral cortical membranes when used at concentrations ranging from 1 to 100 μM.¹ (±)-Norepinephrine induces contraction of bovine anterior cerebral, middle cerebral, and internal carotid arterial strips (EC₅₀s = 0.91, 0.92, and 0.87 μM, respectively) but induces relaxation of bovine posterior cerebral arterial strips (EC₅₀ = 0.95 μM).² Formulations containing (±)-norepinephrine have been used for the restoration of blood pressure in acute hypotensive states.

References

1. Tadokoro, C., Kiuchi, Y., Yamazaki, Y., *et al.* Behavioral stimulation without alteration of β and 5-HT receptors and adenylate cyclase activity in rat brain after chronic sertraline administration. *Psychopharmacology (Berl.)* **130(2)**, 124-130 (1997).
2. Ayajiki, K. and Toda, N. Isolated bovine cerebral arteries from rostral and caudal regions: Distinct responses to adrenoceptor agonists. *Eur. J. Pharmacol.* **191(3)**, 417-425 (1990).

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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