

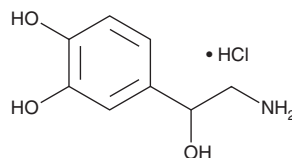
PRODUCT INFORMATION



(±)-Norepinephrine (hydrochloride)

Item No. 35580

CAS Registry No.: 55-27-6
Formal Name: 4-(2-amino-1-hydroxyethyl)-1,2-benzenediol, monohydrochloride
Synonyms: (±)-Arterenol, DL-Noradrenaline, DL-Norepinephrine, (±)-Noradrenaline, NSC 7930
MF: C₈H₁₁NO₃ • HCl
FW: 205.6
Purity: ≥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

(±)-Norepinephrine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the (±)-norepinephrine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. (±)-Norepinephrine (hydrochloride) is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of (±)-norepinephrine (hydrochloride) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of (±)-norepinephrine (hydrochloride) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

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.

WARRANTY AND LIMITATION OF REMEDY

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM