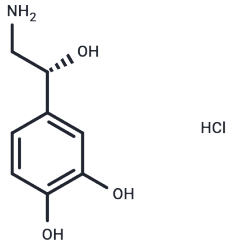
Data Sheet (Cat.No.T60245)

TargetMol

Norepinephrine hydrochloride

Chemical Properties



CAS No. : 329-56-6

Formula: C8H12ClNO3

Molecular Weight: 205.64

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Norepinephrine hydrochloride is the hydrochloride salt of the endogenous catecholamine norepinephrine and acts primarily as an α_1 and β_1 adrenergic receptor agonist. In vivo, norepinephrine functions as a neurotransmitter involved in sympathetic nerve signaling, and in vitro, it is used to study adrenergic receptor-related pathways.
Targets(IC50)	Others,Adrenergic Receptor
In vitro	Methods: HMC3 cells were co-treated with 50 μM Norepinephrine hydrochloride and LPS for 48 hours, and caspase-3 activity was measured using a colorimetric assay. Results: Norepinephrine hydrochloride significantly reduced the LPS-induced increase in caspase-3 activity. [1]

Solubility Information

Solubility	H2O: 80 mg/mL (389.03 mM),Sonication is recommended. DMSO: 40 mg/mL (194.51 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.8629 mL	24.3143 mL	48.6287 mL
5 mM	0.9726 mL	4.8629 mL	9.7257 mL
10 mM	0.4863 mL	2.4314 mL	4.8629 mL
50 mM	0.0973 mL	0.4863 mL	0.9726 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Barczuk J, et al. Noradrenaline Protects Human Microglial Cells (HMC3) Against Apoptosis and DNA Damage Induced by LPS and Aβ1-42 Aggregates In Vitro. Int J Mol Sci. 2024;25(21):11399. Published 2024 Oct 23.
Brian P Ramos, et al. Adrenergic pharmacology and cognition: focus on the prefrontal cortex. Pharmacol Ther. 2007 Mar;113(3):523-36.
MacGregor DA, et al. Relative efficacy and potency of beta-adrenoceptor agonists for generating cAMP in human lymphocytes. Chest. 1996 Jan;109(1):194-200.
Littlejohn NK, et al. Suppression of Resting Metabolism by the Angiotensin AT2 Receptor. Cell Rep. 2016 Aug 9;16(6):1548-60.
Xinyu Xu, et al. Binding pathway determines norepinephrine selectivity for the human β 1 AR over β 2 AR. Cell Res. 2021 May;31(5):569-579.