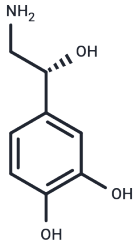
Data Sheet (Cat.No.T7044)

TargetMol

Norepinephrine

Chemical Properties



CAS No. : 51-41-2

Formula: C8H11NO3

Molecular Weight: 169.18

Storage: Keep away from direct sunlight,Keep away from moisture,Store under nitrogen
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 is an alkaloid neurotransmitter and an effective adrenergic receptor (AR) agonist that activates α1, α2, and β1 receptors. It is commonly used as a vasoactive agent for the treatment of shock and can also be used to induce cardiomyopathy models.
Targets(IC50)	MMP,Endogenous Metabolite,Adrenergic Receptor,Autophagy
In vitro	**METHODS**: Adult hippocampal cells were treated with Norepinephrine (0.1-10 μM) for 10-13 days and the number of neurospheres was determined using classical neurosphere assay. **RESULTS**: A significant increase in the number of neurospheres was obtained at 100 nm and in the presence of 1 μM Norepinephrine, and a twofold increase in the number of neurospheres was observed in the presence of 10 μM Norepinephrine. [1] **METHODS**: Human pancreatic cancer cells BxPC-3 and Panc-1 were treated with Norepinephrine (10 μM) for 12-48 h. Cell viability was assayed by MTT Assay. **RESULTS**: Norepinephrine treatment alone significantly enhanced the viability of PDAC cells. [2]
In vivo	**METHODS**: To test in vivo activity, Norepinephrine (0.2-2 mg/kga) was administered intraperitoneally to C57BL6/J mice fed a high-fat diet once daily for two weeks. **RESULTS**: A subset of Norepinephrine-treated mice developed unexpected adverse events, including bladder dilatation and decreased renal perfusion due to renal discoloration. [3]

Solubility Information

Solubility	0.1M HCl: 10 mg/mL (59.11 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble) DMSO: 8.46 mg/mL (50.01 mM),Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 0.1 mg/mL (0.59 mM),Solution. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may*

In vivo Formulation	*vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.9109 mL	29.5543 mL	59.1086 mL
5 mM	1.1822 mL	5.9109 mL	11.8217 mL
10 mM	0.5911 mL	2.9554 mL	5.9109 mL
50 mM	0.1182 mL	0.5911 mL	1.1822 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

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Chen H, Cao N, Wang L, et al. Biased activation of β2-AR/Gi/GRK2 signal pathway attenuated β1-AR sustained activation induced by β1-adrenergic receptor autoantibody. Cell death discovery,. 2021, 7(1): 1-11.

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Zhao X, Li F, Cheng C, et al.Social isolation promotes tumor immune evasion via β2-adrenergic receptor.Brain, Behavior, and Immunity.2024