

Spermidine trihydrochloride

Chemical Properties

CAS No. :	334-50-9
Formula:	C7H22Cl3N3
Molecular Weight:	254.629
Storage:	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	Spermidine trihydrochloride (4-Azaoctamethylenediamine trihydrochloride), a natural polyamine, is a novel autophagy inducer and negatively modulates N-methyl-d-aspartate (NMDA).
Targets(IC50)	Endogenous Metabolite,NMDAR,Autophagy
In vivo	In mouse, Spermidine (200 µg) intracerebellar injection (icb), does not alter basal cGMP levels. Spermidine attenuates responses mediated through the NMDA, NMDA-associated glycine receptor and quisqualate receptors. Spermidine is widely distributed in neural and non-neural tissues and has been shown to play a key role in cell differentiation and growth [2].

Solubility Information

Solubility	H2O: 250.00 mg/mL (981.82 mM),Sonication is recommended. DMSO: 2.55 mg/mL (10.01 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9273 mL	19.6363 mL	39.2727 mL
5 mM	0.7855 mL	3.9273 mL	7.8545 mL
10 mM	0.3927 mL	1.9636 mL	3.9273 mL
50 mM	0.0785 mL	0.3927 mL	0.7855 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

Madeo F, et al. Spermidine: a novel autophagy inducer and longevity elixir. *Autophagy*. 2010 Jan;6(1):160-2.
Rao TS, et al. The polyamines, spermine and spermidine, negatively modulate N-methyl-d-aspartate (NMDA) and quisqualate receptor mediated responses in vivo : Cerebellar cyclic GMP measurements. *Neurochem Int*. 1990;16(2):199-206.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481