

## Spermidine trihydrochloride

## Chemical Properties

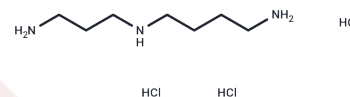
CAS No. : 334-50-9

Formula: C7H22Cl3N3

Molecular Weight: 254.62

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 mg/mL (981.86 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)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9274 mL	19.6371 mL	39.2742 mL
5 mM	0.7855 mL	3.9274 mL	7.8548 mL
10 mM	0.3927 mL	1.9637 mL	3.9274 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.

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