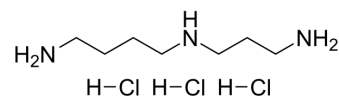


Spermidine hydrochloride

Cat. No.:	HY-B1776A
CAS No.:	334-50-9
Molecular Formula:	C ₇ H ₂₂ Cl ₃ N ₃
Molecular Weight:	254.63
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro	H ₂ O : 250 mg/mL (981.82 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass			
		Concentration		1 mg	5 mg	10 mg
		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	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: PBS Solubility: 100 mg/mL (392.73 mM); Clear solution; Need ultrasonic					

BIOLOGICAL ACTIVITY

Description	Spermidine hydrochloride maintains cell membrane stability, increases antioxidant enzymes activities, improving photosystem II (PSII), and relevant gene expression. Spermidine hydrochloride significantly decreases the H ₂ O ₂ and O ₂ ⁻ contents ^[1] .	
IC₅₀ & Target	Microbial Metabolite	Human Endogenous Metabolite
In Vitro	Spermidine hydrochloride plays a crucial role of against abiotic stresses, such as salt, drought, heat, and salinity-alkalinity stresses in tomato, cucumber, rice ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

CUSTOMER VALIDATION

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- EMBO J. 2022 Dec 7;e111364.
 - Virus Res. 2022 Feb 11;312:198708.
 - bioRxiv. 2023 Jun 3.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Zhang L, et al. The Alleviation of Heat Damage to Photosystem II and Enzymatic Antioxidants by Exogenous Spermidine in Tall Fescue. Front Plant Sci. 2017 Oct 12;8:1747.

Caution: Product has not been fully validated for medical applications. For research use only.

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