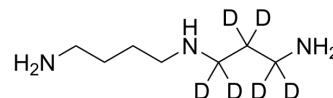


Spermidine-d₆

Cat. No.:	HY-B1776S	
CAS No.:	2514812-10-1	
Molecular Formula:	C ₇ H ₁₃ D ₆ N ₃	
Molecular Weight:	151.28	
Target:	Endogenous Metabolite	
Pathway:	Metabolic Enzyme/Protease	
Storage:	Pure form	-20°C 3 years 4°C 2 years
	In solvent	-80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

H₂O : 100 mg/mL (661.03 mM; Need ultrasonic and warming)

Water : ≥ 50 mg/mL (330.51 mM)

* "≥" means soluble, but saturation unknown.

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	6.6103 mL	33.0513 mL	66.1026 mL
5 mM	1.3221 mL	6.6103 mL	13.2205 mL
10 mM	0.6610 mL	3.3051 mL	6.6103 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Spermidine-d₆ is the deuterium labeled Spermidine[1]. Spermidine maintains cell membrane stability, increases antioxidant enzymes activities, improving photosystem II (PSII), and relevant gene expression. Spermidine significantly decreases the H₂O₂ and O₂.- contents[2].

In Vitro

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.

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

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