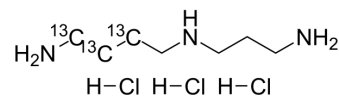


Spermidine-¹³C₄ hydrochloride

Cat. No.:	HY-B1776AS1
CAS No.:	1313734-84-7
Molecular Formula:	C ₄ ¹³ C ₃ H ₁₆ Cl ₃ N ₃
Molecular Weight:	251.56
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



BIOLOGICAL ACTIVITY

Description	Spermidine- ¹³ C ₄ (hydrochloride) is the ¹³ C-labeled Spermidine trihydrochloride. 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].
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;53(2):211-216.
- [2]. 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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