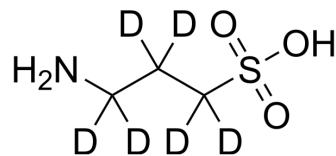


Tramiprosate-d₆

Cat. No.:	HY-14602S		
CAS No.:	1131576-06-1		
Molecular Formula:	C ₃ H ₃ D ₆ NO ₃ S		
Molecular Weight:	145.21		
Target:	Amyloid-β		
Pathway:	Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

H₂O : 50 mg/mL (344.33 mM; ultrasonic and warming and heat to 60°C)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	6.8866 mL	34.4329 mL	68.8658 mL
5 mM	1.3773 mL	6.8866 mL	13.7732 mL
10 mM	0.6887 mL	3.4433 mL	6.8866 mL

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

BIOLOGICAL ACTIVITY

Description

Tramiprosate-d₆ is the deuterium labeled Tramiprosate. Tramiprosate (Homotaurine), an orally active and brain-penetrant natural amino acid found in various species of red marine algae. Tramiprosate binds to soluble Aβ and maintains Aβ in a non-fibrillar form. Tramiprosate is also a GABA analog and possess neuroprotection, anticonvulsion and antihypertension effects^{[1][2][3]}.

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.

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- [2]. Wu S et al. Tramiprosate protects neurons against ischemic stroke by disrupting the interaction between PSD95 and nNOS. *Neuropharmacology*. 2014 Aug;83:107-17.
- [3]. Francine Gervais, et al. Targeting soluble Abeta peptide with Tramiprosate for the treatment of brain amyloidosis. *Neurobiol Aging*. 2007 Apr;28(4):537-47.
- [4]. R G Fariello, et al. Homotaurine (3 aminopropanesulfonic acid; 3APS) protects from the convulsant and cytotoxic effect of systemically administered kainic acid. *Neurology*. 1982 Mar;32(3):241-5.
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Caution: Product has not been fully validated for medical applications. For research use only.

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