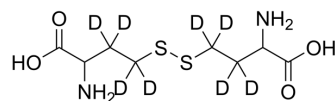


DL-Homocystine-3,3,3',3',4,4,4',4'-d₈

Cat. No.:	HY-W009390S
CAS No.:	108641-82-3
Molecular Formula:	C ₈ H ₈ D ₈ N ₂ O ₄ S ₂
Molecular Weight:	276.4
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

H₂O : 1 mg/mL (3.62 mM; ultrasonic and warming and heat to 60°C)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	3.6179 mL	18.0897 mL	36.1795 mL
5 mM	---	---	---
10 mM	---	---	---

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

BIOLOGICAL ACTIVITY

Description

DL-Homocystine-3,3,3',3',4,4,4',4'-d₈ is the deuterium labeled DL-Homocystine. DL-Homocystine is the double-bonded form of homocysteine and homocysteine is recognized as an important substance in the pathogenesis and pathophysiology of schizophrenia[1][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;53(2):211-216.

[2]. Brown AS, et al. Homocysteine and schizophrenia: from prenatal to adult life. *Prog Neuropsychopharmacol Biol Psychiatry*. 2005 Sep;29(7):1175-80.

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

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