Product Data Sheet

L-Asparagine-d₃ hydrate

Cat. No.: HY-N0667S5 CAS No.: 2483831-59-8 Molecular Formula: $C_4H_7D_3N_2O_4$ Molecular Weight: 153.15

Target: Endogenous Metabolite; Isotope-Labeled Compounds

Pathway: Metabolic Enzyme/Protease; Others

Powder -20°C Storage: 3 years

> 4°C 2 years

-80°C In solvent 6 months

> -20°C 1 month

$$H_2N$$
 O
 O
 NH_2
 O
 O
 O

SOLVENT & SOLUBILITY

H₂O: 6.67 mg/mL (43.55 mM; Need ultrasonic) In Vitro

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Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	6.5295 mL	32.6477 mL	65.2955 mL
	5 mM	1.3059 mL	6.5295 mL	13.0591 mL
	10 mM	0.6530 mL	3.2648 mL	6.5295 mL

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

BIOLOGICAL ACTIVITY

Description L-Asparagine-d₃ (hydrate) is the deuterium labeled L-Asparagine. L-Asparagine ((-)-Asparagine) is a non-essential amino acid that is involved in the metabolic control of cell functions in nerve and brain tissue.

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

In Vitro

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

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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