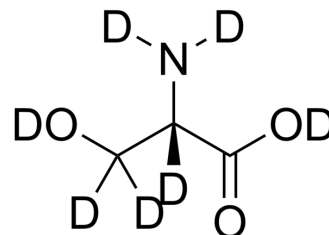


## L-Serine-d<sub>7</sub>

<b>Cat. No.:</b>	HY-N0650S11		
<b>CAS No.:</b>	935275-35-7		
<b>Molecular Formula:</b>	C <sub>3</sub> D <sub>7</sub> NO <sub>3</sub>		
<b>Molecular Weight:</b>	112.14		
<b>Target:</b>	Endogenous Metabolite; Isotope-Labeled Compounds		
<b>Pathway:</b>	Metabolic Enzyme/Protease; Others		
<b>Storage:</b>	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 50 mg/mL (445.87 mM; Need ultrasonic and warming)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	8.9174 mL	44.5871 mL	89.1742 mL
5 mM	1.7835 mL	8.9174 mL	17.8348 mL
10 mM	0.8917 mL	4.4587 mL	8.9174 mL

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

### BIOLOGICAL ACTIVITY

#### Description

L-Serine-d<sub>7</sub> is the deuterium labeled L-Serine. L-Serine ((-)-Serine; (S)-Serine), one of the so-called non-essential amino acids, plays a central role in cellular proliferation.

#### 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<sup>[1]</sup>.

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

### REFERENCES

[1]. de Koning TJ, et al. L-Serine in disease and development. *Biochem J.* 2003 May 1;371(Pt 3):653-61.

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

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

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