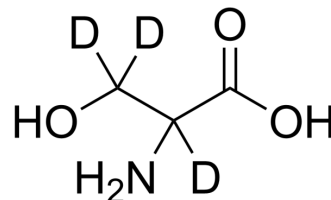


## DL-Serine-2,3,3-d<sub>3</sub>

<b>Cat. No.:</b>	HY-Y0507S		
<b>CAS No.:</b>	70094-78-9		
<b>Molecular Formula:</b>	C <sub>3</sub> H <sub>4</sub> D <sub>3</sub> NO <sub>3</sub>		
<b>Molecular Weight:</b>	108.11		
<b>Target:</b>	TMV; Isotope-Labeled Compounds		
<b>Pathway:</b>	Anti-infection; Others		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 41.67 mg/mL (385.44 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1 mg	5 mg	10 mg
	1 mM		9.2498 mL	46.2492 mL	92.4984 mL
	5 mM		1.8500 mL	9.2498 mL	18.4997 mL
	10 mM		0.9250 mL	4.6249 mL	9.2498 mL

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

### BIOLOGICAL ACTIVITY

#### Description

DL-Serine-2,3,3-d<sub>3</sub> is the deuterium labeled DL-Serine. DL-Serine, a fundamental metabolite, is a mixture of D-Serine and L-Serine. DL-Serine has antiviral activity against the multiplication of tobacco mosaic virus (TMV)[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<sup>[1]</sup>.

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

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