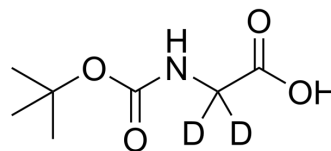


## Boc-Glycine-d<sub>2</sub>

<b>Cat. No.:</b>	HY-Y0978S1		
<b>CAS No.:</b>	42492-65-9		
<b>Molecular Formula:</b>	C <sub>7</sub> H <sub>11</sub> D <sub>2</sub> NO <sub>4</sub>		
<b>Molecular Weight:</b>	177.19		
<b>Target:</b>	Isotope-Labeled Compounds		
<b>Pathway:</b>	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

<b>In Vitro</b>	DMSO : 250 mg/mL (1410.91 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	5.6437 mL	28.2183 mL	56.4366 mL
		5 mM	1.1287 mL	5.6437 mL	11.2873 mL
10 mM		0.5644 mL	2.8218 mL	5.6437 mL	
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.08 mg/mL (11.74 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (11.74 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.08 mg/mL (11.74 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	Boc-Glycine-d <sub>2</sub> is the deuterium labeled Boc-Glycine[1].
<b>In Vitro</b>	<p>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>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

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## REFERENCES

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[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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