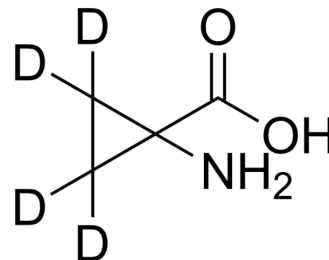


## 1-Aminocyclopropane-1-carboxylic acid-d<sub>4</sub>

Cat. No.:	HY-30004S
CAS No.:	84392-07-4
Molecular Formula:	C <sub>4</sub> H <sub>3</sub> D <sub>4</sub> NO <sub>2</sub>
Molecular Weight:	105.13
Target:	Endogenous Metabolite; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : ≥ 100 mg/mL (951.20 mM)  
 DMSO : < 1 mg/mL (ultrasonic;warming;heat to 70°C) (insoluble or slightly soluble)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
	1 mM		9.5120 mL	47.5602 mL	95.1203 mL
	5 mM		1.9024 mL	9.5120 mL	19.0241 mL
	10 mM		0.9512 mL	4.7560 mL	9.5120 mL

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

### BIOLOGICAL ACTIVITY

#### Description

1-Aminocyclopropane-1-carboxylic acid-d<sub>4</sub> is the deuterium labeled 1-Aminocyclopropane-1-carboxylic acid. Aminocyclopropane-1-carboxylic acid is an endogenous metabolite[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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