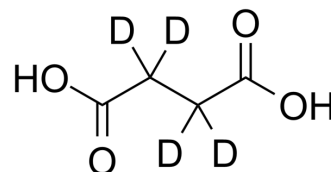


## Succinic-2,2,3,3-d<sub>4</sub> acid

<b>Cat. No.:</b>	HY-N0420S1		
<b>CAS No.:</b>	14493-42-6		
<b>Molecular Formula:</b>	C <sub>4</sub> H <sub>2</sub> D <sub>4</sub> O <sub>4</sub>		
<b>Molecular Weight:</b>	122.11		
<b>Target:</b>	Endogenous Metabolite		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### BIOLOGICAL ACTIVITY

<b>Description</b>	Succinic-2,2,3,3-d <sub>4</sub> acid is the deuterium labeled Succinic acid. Succinic acid is an intermediate product of the tricarboxylic acid cycle, as well as one of fermentation products of anaerobic metabolism.
<b>In Vitro</b>	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.
- [2]. Zhang YJ, et al. Optimization of succinic acid fermentation with *Actinobacillus succinogenes* by response surface methodology (RSM). *J Zhejiang Univ Sci B.* 2012 Feb;13(2):103-10.

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

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