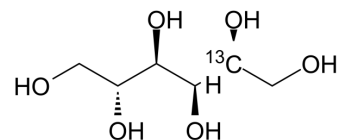


## D-Sorbitol-13C

<b>Cat. No.:</b>	HY-B0400S1		
<b>CAS No.:</b>	287100-73-6		
<b>Molecular Formula:</b>	C <sub>5</sub> <sup>13</sup> CH <sub>14</sub> O <sub>6</sub>		
<b>Molecular Weight:</b>	183.16		
<b>Target:</b>	Endogenous Metabolite		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<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 : 250 mg/mL (1364.93 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	5.4597 mL	27.2985 mL	54.5971 mL
5 mM	1.0919 mL	5.4597 mL	10.9194 mL
10 mM	0.5460 mL	2.7299 mL	5.4597 mL

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

### BIOLOGICAL ACTIVITY

#### Description

D-Sorbitol-<sup>13</sup>C is the <sup>13</sup>C labeled D-Sorbitol. D-Sorbitol (Sorbitol) is a six-carbon sugar alcohol and can be used as a sugar substitute. D-Sorbitol can be used as a stabilizing excipient and/or isotonicity agent, sweetener, humectant, thickener and dietary s

#### 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 Feb;53(2):211-216.

[2]. Ranjeet Prasad Dash, et al. Use of sorbitol as pharmaceutical excipient in the present day formulations - issues and challenges for drug absorption and bioavailability. *Drug Dev Ind Pharm*. 2019 Sep;45(9):1421-1429.

---

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA