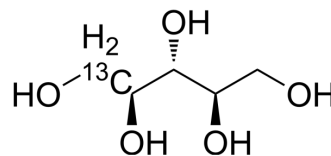


## Ribitol-1-<sup>13</sup>C

Cat. No.:	HY-100582S
Molecular Formula:	C <sub>4</sub> <sup>13</sup> CH <sub>12</sub> O <sub>5</sub>
Molecular Weight:	153.14
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.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Ribitol-1- <sup>13</sup> C is the <sup>13</sup> C labeled Ribitol. Ribitol is a crystalline pentose alcohol formed by the reduction of ribose. Enhancing the flux of D-glucose to the pentose phosphate pathway in <i>Saccharomyces cerevisiae</i> for the production of D-ribose and ribitol
<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 Feb;53(2):211-216.
- [2]. Praissman JL, et al. The functional O-mannose glycan on  $\alpha$ -dystroglycan contains a phospho-Ribitol primed for matriglycan addition. *Elife*. 2016 Apr 29;5. pii: e14473.; Toivari MH, et al. Enhancing the flux of D-glucose to the pentose phosphate pathway in *Sa*

**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

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