## **Product** Data Sheet

## $\hbox{1-O-n-Octyl-$\beta$-D-glucopyranoside-} d_{17}$

 Cat. No.:
 HY-116285S1

 CAS No.:
 129522-81-2

 Molecular Formula:
  $C_{14}H_{11}D_{17}O_6$ 

Molecular Weight: 309.47

Target: Isotope-Labeled Compounds

Pathway: Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	1-O-n-Octyl- $\beta$ -D-glucopyranoside- $d_{17}$ is the deuterium labeled n-Octyl $\beta$ -D-glucopyranoside[1]. n-Octyl- $\beta$ -d-glucopyranoside is a non-ionic detergent, it can be widely used in the research of biotechnical, biochemical applications, solubilization and crystallization of membrane proteins[2][3].
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]. Konidala P, et al. Molecular dynamics characterization of n-octyl-beta-D-glucopyranoside micelle structure in aqueous solution. J Mol Graph Model. 2006 Sep;25(1):77-86.

[3]. Gould RJ, et al. Effects of octyl beta-glucoside on insulin binding to solubilized membrane receptors. Biochemistry. 1981 Nov 2420(24):6776-81.

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

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