MedChemExpress

## Product Data Sheet

Sucrose-d 14

| Cat. No.: | HY-B1779S3 |  |  |
| :---: | :---: | :---: | :---: |
| Molecular Formula: | $\mathrm{C}_{12} \mathrm{H}_{8} \mathrm{D}_{14} \mathrm{O}_{11}$ |  |  |
| Molecular Weight: | 356.38 |  |  |
| Target: | Endogenous Metabolite |  |  |
| Pathway: | Metabolic Enzyme/Protease |  |  |
| Storage: | Powder | $-20^{\circ} \mathrm{C}$ | 3 years |
|  |  | $4^{\circ} \mathrm{C}$ | 2 years |
|  | In solvent | $-80^{\circ} \mathrm{C}$ | 6 months |
|  |  | $-20^{\circ} \mathrm{C}$ | 1 month |



## SOLVENT \& SOLUBILITY

In Vitro
$\mathrm{H}_{2} \mathrm{O}: \geq 50 \mathrm{mg} / \mathrm{mL}(140.30 \mathrm{mM})$

* " $\geq$ " means soluble, but saturation unknown.

|  | Solvent Mass |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Concentration | 1 mg | 5 mg | 10 mg |  |
| Preparing |  |  |  |  |
| Stock Solutions | 1 mM | 2.8060 mL | 14.0300 mL | 28.0599 mL |
|  | 5 mM | 0.5612 mL | 2.8060 mL | 5.6120 mL |
|  | 10 mM | 0.2806 mL | 1.4030 mL | 2.8060 mL |

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

## BIOLOGICAL ACTIVITY

Description

In Vitro

Sucrose- $\mathrm{d}_{14}$ is the deuterium labeled Sucrose. Sucrose (D-(+)-Saccharose) is a disaccharide which is composed of two monosaccharides, glucose and fructose. Sucrose can be applied in some animal models, including metabolic disease, obesity, diet on preferen

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 ${ }^{[1]}$.
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## REFERENCES

[^0]
## Caution: Product has not been fully validated for medical applications. For research use only.

[^1]
[^0]:    1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.

    2]. Duca FA, et al. Effect of diet on preference and intake of sucrose in obese prone and resistant rats. PLoS One. 2014 Oct 20;9(10):el11232.

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