Inhibitors

## **Product** Data Sheet

## p-Toluenesulfonic acid-d7 monohydrate

 Cat. No.:
 HY-W015175S

 CAS No.:
 1219795-22-8

 Molecular Formula:
 C,H,D,O,S

Molecular Weight: 197.26

Target: Isotope-Labeled Compounds

Pathway: Others

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

Analysis.

D O OH

 $H_2O$ 

## **BIOLOGICAL ACTIVITY**

Description	p-Toluenesulfonic acid-d <sub>7</sub> (monohydrate) is the deuterium labeled p-Toluenesulfonic acid monohydrate[1]. p-Toluenesulfonic acid monohydrate, a strong organic acid, acts as organic catalyst used in organic synthesis[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]. Tashiro S, et al. Non-covalent immobilisation of p-toluenesulfonic acid in a porous molecular crystal for size-specific acid-catalysed reactions. Chem Commun (Camb). 2016 Jun 8;52(49):7657-60.

[3]. Quan XJ, et al. p-Toluenesulfonic acid mediated 1,3-dipolar cycloaddition of nitroolefins with NaN3 for synthesis of 4-aryl-NH-1,2,3-triazoles. Org Lett. 2014 Nov 716(21):5728-31.

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

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