## **Product** Data Sheet

## PIPES-d<sub>18</sub>

Cat. No.:HY-D0875SCAS No.:352534-95-3Molecular Formula: $C_8D_{18}N_2O_6S_2$ Molecular Weight:320.48

Target: Isotope-Labeled Compounds

Pathway: Others

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

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	PIPES- $d_{18}$ is the deuterium labeled PIPES[1]. PIPES (1,4-Piperazinediethanesulfonic acid) is an important component of PIPES buffer agent used in biochemistry[2].
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]. Jason Moggridge, et al. Sensitive Detection of Immunoglobulin G Stability Using in Real-Time Isothermal Differential Scanning Fluorimetry: Determinants of Protein Stability for Antibody-Based Therapeutics. Technol Cancer Res Treat. 2017 Dec;16(6):997-1005.

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

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