Inhibitors



## Sulfamonomethoxine-d3-1

 Cat. No.:
 HY-B0946S3

 CAS No.:
 2704162-84-3

 Molecular Formula:
 C<sub>11</sub>H<sub>2</sub>D<sub>3</sub>N<sub>4</sub>O<sub>3</sub>S

Molecular Weight: 283.32

Target: Bacterial; Antibiotic

Pathway: Anti-infection

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

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	Sulfamonomethoxine- $d_3$ -1 is the deuterium labeled Sulfamonomethoxine[1]. Sulfamonomethoxine is a long acting sulfonamide antibacterial agent, used in blood kinetic studies, and blocks the synthesis of folic acid by inhibiting synthetase of dihydropteroate[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]. Ryuji Ueno. Pharmacokinetics and Bioavailability of Sulfamonomethoxine in Cultured Eel. Fish Pathology, 33(4), 297-301, 1998.10.

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

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