## **Product** Data Sheet

## Ethionamide-d3

Cat. No.: HY-B0276S Molecular Formula:  $C_8H_7D_3N_2S$  Molecular Weight: 169.26

Target: Bacterial; Antibiotic

Pathway: Anti-infection

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

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	Ethionamide-d3 (2-ethylthioisonicotinamide-d3) is the deuterium labeled Ethionamide. Ethionamide (2-ethylthioisonicotinamide) is an antibiotic used in the treatment of tuberculosis.
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;53(2):211-216.

[2]. Vannelli, T.A., A. Dykman, and P.R. Ortiz de Montellano, The antituberculosis drug ethionamide is activated by a flavoprotein monooxygenase. J Biol Chem, 2002. 277(15): p. 12824-9.

[3]. Quemard, A., G. Laneelle, and C. Lacave, Mycolic acid synthesis: a target for ethionamide in mycobacteria? Antimicrob Agents Chemother, 1992. 36(6): p. 1316-21.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA