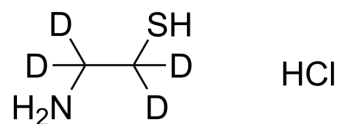


Cysteamine-d₄ hydrochloride

Cat. No.:	HY-77591S
CAS No.:	1219805-04-5
Molecular Formula:	C ₂ H ₄ D ₄ ClNS
Molecular Weight:	117.63
Target:	Apoptosis; Autophagy; Endogenous Metabolite; Reactive Oxygen Species; Isotope-Labeled Compounds
Pathway:	Apoptosis; Autophagy; Metabolic Enzyme/Protease; Immunology/Inflammation; NF-κB; Others
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



BIOLOGICAL ACTIVITY

Description	Cysteamine-d ₄ (hydrochloride) is the deuterium labeled Cysteamine hydrochloride. Cysteamine hydrochloride (2-Aminoethanethiol hydrochloride) is an orally active agent for the treatment of nephropathic cystinosis and an antioxidant.
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 ^[1] . 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]. Besouw, M., et al., Cysteamine: an old drug with new potential. *Drug Discov Today.* 2013. 18(15-16): p. 785-92.
- [3]. de Matos, D.G., et al., Effect of cysteamine on glutathione level and developmental capacity of bovine oocyte matured in vitro. *Mol Reprod Dev.* 1995. 42(4): p. 432-6.

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