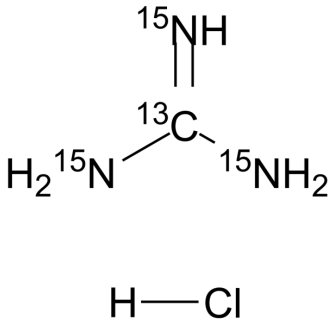
Guanidine-13C,15N3 hydrochloride

Cat. No.:	HY-B0178AS
CAS No.:	285977-73-3
Molecular Formula:	$^{13}CH_6Cl\ ^{15}N_3$
Molecular Weight:	99.5
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Guanidine-13C,15N3 hydrochloride (Guanidinium-13C,15N3 chloride) is the 13C-labeled and 15N-labeled Guanidine hydrochloride. Guanidine hydrochloride (Guanidinium chloride) a strong chaotrope, is also a strong denaturant of proteins [1][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[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]. Y Hagihara, et al. Guanidine hydrochloride-induced folding of proteins. J Mol Biol. 1993 May 20;231(2):180-4.

[3]. G Jung, et al. Guanidine hydrochloride inhibits Hsp104 activity in vivo: a possible explanation for its effect in curing yeast prions. Curr Microbiol. 2001 Jul;43(1):7-10.

[4]. Saeed Emadi, et al. A comparative study on the aggregating effects of guanidine thiocyanate, guanidine hydrochloride and urea on lysozyme aggregation. Biochem Biophys Res Commun. 2014 Aug 8;450(4):1339-44.

[5]. E C Herrmann Jr, et al. Prevention of death in mice infected with coxsackievirus A16 using guanidine HCl mixed with substituted benzimidazoles. Antiviral Res. 1982 Dec;2(6):339-46.

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