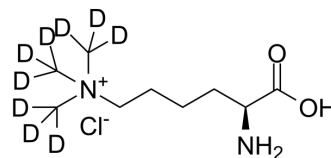


Nε,Nε,Nε-Trimethyllysine-d₉ chloride

Cat. No.:	HY-N7404S
Molecular Formula:	C ₉ H ₁₂ D ₉ ClN ₂ O ₂
Molecular Weight:	233.78
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H₂O : 2.94 mg/mL (12.58 mM; ultrasonic and warming and heat to 80°C)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	4.2775 mL	21.3876 mL	42.7753 mL
	5 mM	0.8555 mL	4.2775 mL	8.5551 mL
	10 mM	0.4278 mL	2.1388 mL	4.2775 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Nε,Nε,Nε-Trimethyllysine-d₉ (chloride) is the deuterium labeled Nε,Nε,Nε-Trimethyllysine (chloride)[1]. Nε,Nε,Nε-Trimethyllysine chloride serves as a precursor for gut flora-dependent formation of N,N,N-trimethyl-5-aminovaleric acid (TMAVA)[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 Feb;53(2):211-216.
- [2]. Zhao M, et al. TMAVA, a Metabolite of Intestinal Microbes, Is Increased in Plasma From Patients With Liver Steatosis, Inhibits γ-Butyrobetaine Hydroxylase, and Exacerbates Fatty Liver in Mice. *Gastroenterology*. 2020;158(8):2266-2281.e27.

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