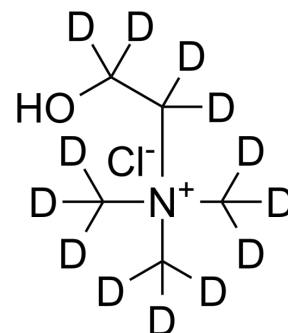


## Choline-d<sub>13</sub> chloride

Cat. No.:	HY-B1337S3
CAS No.:	352438-97-2
Molecular Formula:	C <sub>5</sub> HD <sub>13</sub> ClNO
Molecular Weight:	152.7
Target:	Endogenous Metabolite; Cholinesterase (ChE)
Pathway:	Metabolic Enzyme/Protease; Neuronal Signaling
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

DMSO : 140 mg/mL (916.83 mM; Need ultrasonic and warming)

	Solvent Concentration	Mass			
		1 mg	5 mg	10 mg	
Preparing Stock Solutions	1 mM	6.5488 mL	32.7439 mL	65.4879 mL	
	5 mM	1.3098 mL	6.5488 mL	13.0976 mL	
	10 mM	0.6549 mL	3.2744 mL	6.5488 mL	

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

### BIOLOGICAL ACTIVITY

#### Description

Choline-d<sub>13</sub> (chloride) is the deuterium labeled Choline chloride. Choline chloride is an organic compound and a quaternary ammonium salt, an acyl group acceptor and choline acetyltransferase substrate, also is an important additive in feed especially for chickens where it accelerates growth.

#### 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.

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

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