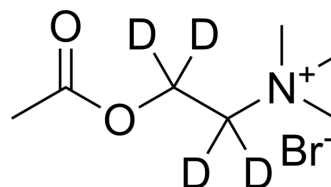


## Acetylcholine-d<sub>4</sub> bromide

<b>Cat. No.:</b>	HY-B0282AS1
<b>CAS No.:</b>	93449-31-1
<b>Molecular Formula:</b>	C <sub>7</sub> H <sub>12</sub> D <sub>4</sub> BrNO <sub>2</sub>
<b>Molecular Weight:</b>	230.14
<b>Target:</b>	nAChR; Calcium Channel; Endogenous Metabolite; Isotope-Labeled Compounds
<b>Pathway:</b>	Membrane Transporter/Ion Channel; Neuronal Signaling; Metabolic Enzyme/Protease; Others
<b>Storage:</b>	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

H<sub>2</sub>O : 250 mg/mL (1086.30 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	4.3452 mL	21.7259 mL	43.4518 mL
5 mM	0.8690 mL	4.3452 mL	8.6904 mL
10 mM	0.4345 mL	2.1726 mL	4.3452 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Acetylcholine-d<sub>4</sub> (bromide) is the deuterium labeled Acetylcholine bromide[1].

#### 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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