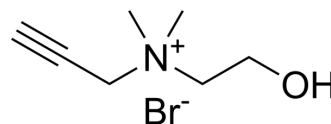


Propargylcholine bromide

Cat. No.:	HY-129084
CAS No.:	111755-76-1
Molecular Formula:	C ₇ H ₁₄ BrNO
Molecular Weight:	208.1
Target:	Others
Pathway:	Others
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 : 125 mg/mL (600.67 mM; Need ultrasonic)
H₂O : 125 mg/mL (600.67 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
		Concentration	1 mg	5 mg	10 mg
	1 mM		4.8054 mL	24.0269 mL	48.0538 mL
	5 mM		0.9611 mL	4.8054 mL	9.6108 mL
	10 mM		0.4805 mL	2.4027 mL	4.8054 mL

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

BIOLOGICAL ACTIVITY

Description

Propargylcholine bromide is a choline analogue containing terminal propargyl that can be incorporated into all classes of Choline-containing phospholipids such as phosphatidylcholine and sphingomyelin, labeling Choline-containing phospholipids. Propargylcholine bromide-labeled phospholipid molecules can be visualized in cells with high sensitivity and spatial resolution. Propargylcholine bromide can be used as a molecular tool to study the biochemical and metabolic processes of Choline-containing phospholipids in cells^{[1][2]}. Propargylcholine (bromide) is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAC) with molecules containing Azide groups.

In Vitro

Propargylcholine bromide (10, 50 μM; 24 h) incorporates into NIH 3T3 cells and shows strong staining in a concentration-dependent manner (fixed and stained with Alexa568-azide)^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Immunofluorescence^[1]

Cell Line:	NIH 3T3 cells
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	Concentration:	10, 50 μ M
	Incubation Time:	24 h
	Result:	Showed strong staining proportional in intensity to the concentration of added Propargylcholine bromide.
In Vivo	Propargylcholine bromide (P-Cho; 3.5-4.0 mg/kg; i.p; single daily for 6 days) effectively incorporates into newly synthesized myelin within 1 week of dosing and sustained presence beyond 6 weeks in rhesus monkey ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

REFERENCES

- [1]. Jao CY, et al. Metabolic labeling and direct imaging of choline phospholipids in vivo. Proc Natl Acad Sci U S A. 2009 Sep 8;106(36):15332-7.
- [2]. Karen R. Bottenfield, et al. Optimization of Propargylcholine to Label Newly Synthesized Myelin in the Rhesus Monkey Brain. FASEB J. 2020, 34(S1): 1-1.

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