

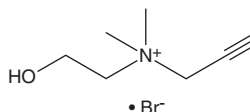
PRODUCT INFORMATION



Propargylcholine (bromide)

Item No. 25870

CAS Registry No.: 111755-76-1
Formal Name: N-(2-hydroxyethyl)-N,N-dimethyl-2-propyn-1-aminium, monobromide
Synonym: Click Tag™ Propargylcholine
MF: C₇H₁₄NO • Br
FW: 208.1
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Propargylcholine (bromide) is supplied as a crystalline solid. A stock solution may be made by dissolving the propargylcholine (bromide) in the solvent of choice. Propargylcholine (bromide) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of propargylcholine (bromide) in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of propargylcholine (bromide) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of propargylcholine (bromide) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Propargylcholine is an alkynyl derivative of choline that has a propargyl group in place of one methyl group.¹ It can be used to assay phospholipid synthesis and localization in cells and tissues using Raman scattering microscopy or click chemistry labeling with fluorescent or affinity-tagged azides.¹⁻³ Propargylcholine also inhibits growth of *P. aeruginosa* on dimethylglycine (IC₅₀ = 5.16 μM), choline, and glycine betaine.⁴

References

1. Salic, A. Compositions and methods for labeling and imaging phospholipids. *Harvard College US20120028290A1* (2012).
2. Wei, L., Hu, F., Shen, Y., et al. Live-cell imaging of alkyne-tagged small biomolecules by stimulated Raman scattering. *Nat. Methods* **11(4)**, 410-412 (2014).
3. Li, C., Key, J.A., Jia, F., et al. Practical labeling methodology for choline-derived lipids and applications in live cell fluorescence imaging. *Photochem. Photobiol.* **90(3)**, 686-695 (2014).
4. Fitzsimmons, L.F., Flemer, S., Jr., Wurthmann, A.S., et al. Small-molecule inhibition of choline catabolism in *Pseudomonas aeruginosa* and other aerobic choline-catabolizing bacteria. *Appl. Environ. Microbiol.* **77(13)**, 4383-4389 (2011).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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