

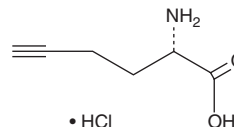
PRODUCT INFORMATION



L-Homopropargyl Glycine (hydrochloride)

Item No. 11785

CAS Registry No.: 942518-19-6
Formal Name: (2S)-2-amino-5-hexynoic acid, monohydrochloride
Synonym: Click Tag™ L-Homopropargyl Glycine, HPG
MF: C₆H₉NO₂ • HCl
FW: 163.6
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

L-Homopropargyl glycine (hydrochloride) is supplied as a crystalline solid. Aqueous solutions of L-homopropargyl glycine (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of L-homopropargyl glycine (hydrochloride) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

L-Homopropargyl glycine is a reactive methionine analog that contains an alkyne moiety. It is readily inserted into newly-synthesized proteins in place of methionine.¹⁻³ L-Homopropargyl glycine can then be labeled or captured through click chemistry.^{2,4} This approach represents a fast, sensitive, and non-radioactive alternative to [³⁵S]-methionine for the detection of nascent protein synthesis.

References

1. Beatty, K.E. and Tirrell, D.A. Two-color labeling of temporally defined protein populations in mammalian cells. *Bioorg. Med. Chem. Lett.* **18(22)**, 5995-5999 (2008).
2. Ngo, J.T. and Tirrell, D.A. Non-canonical amino acids in the interrogation of cellular protein synthesis. *Acc. Chem. Res.* **44(9)**, 677-685 (2011).
3. Landgraf, P., Antileo, E.R., Schuman, E.M., *et al.* BONCAT: Metabolic labeling, click chemistry, and affinity purification of newly synthesized proteomes. *Site-specific protein labeling*. Gautier, A. and Hinner, M., editors, *Humana Press* (2015).
4. Dieterich, D.C., Hodas, J.J.L., Gouzer, G., *et al.* *In situ* visualization and dynamics of newly synthesized proteins in rat hippocampal neurons. *Nat. Neurosci.* **13(7)**, 897-905 (2010).

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.

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