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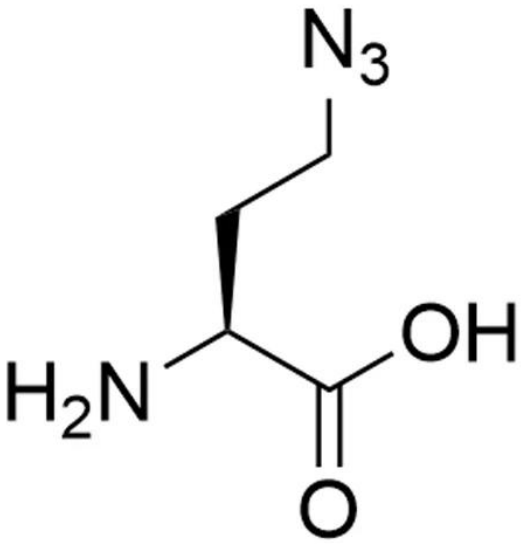
L-AZIDOHOMOALANINE (AHA)

SKU: CCT-1066



DESCRIPTION

L-Azidohomoalanine (AHA) is an amino acid analog of methionine that contains a very small modification, specifically an azido moiety that can be fed to cultured cells and incorporated into proteins during active protein synthesis. Detection utilizes the chemoselective ligation or “click ” reaction between an azide and an alkyne or cyclooctyne. The azido-modified protein is detected with either fluorescent alkyne or biotin alkyne. Detection sensitivity with these reagents in 1-D gels and Western blots is in the low femtomole range and compatible with downstream LC-MS/MS and MALDI MS analysis.

SPECIFICATIONS

CAS Number	942518-29-8
Molecular Weight	180.59

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.

Molecular Formula	C4H9ClN4O2
Appearance	White crystalline
Chemical Formula	C4H9ClN4O2
Purity	>95% (H NMR)
Unit Size	25 mg, 100 mg, 1000 mg, 5 g
Solubility	Water, DMSO, DMF
Storage Instructions	-20°C.
Shipping Conditions	Ambient temperature
Shipping Instructions	Ambient temperature

SELECTED REFERENCES

1. Loebel , C., *et al.* (2022). Metabolic labeling of secreted matrix to investigate cell-material interactions in tissue engineering and mechanobiology. *Nat Protoc.*, **10.1038**, Online ahead of print. [PubMed]
2. Bruna, R. E., *et al.* (2021). Limitation of phosphate assimilation maintains cytoplasmic magnesium homeostasis. *Proc Natl Acad Sci U S A.*, **118 (11)**, e2021370118. [PubMed]
3. Costello, A., *et al.* (2021). Directed evolution of rRNA improves translation kinetics and recombinant protein yield. *Nat Commun.*, **12 (1)**, 5638. [PubMed]
4. Kwong, J. Q., *et al.* (2021). Mitochondrial functional resilience after TFAM ablation in the adult heart. *Am J Physiol Cell Physiol.*, **320 (6)**, C929-C942. [PubMed]
5. Heybrock, S., *et al.* (2021). S-palmitoylation determines TMEM55B-dependent positioning of lysosomes. *J Cell Sci.*, **135 (5)**, jcs258566. [PubMed]
6. Coates, H. W. *et al.* (2021). The mammalian cholesterol synthesis enzyme squalene monooxygenase is proteasomally truncated to a constitutively active form. *J Biol Chem.*, Online ahead of print. [PubMed]
7. Morral, C., *et al.* (2020). Zonation of Ribosomal DNA Transcription Defines a Stem Cell Hierarchy in Colorectal Cancer. *Cell Stem Cell.*, **26 (6)**, 845-861.e12. [PubMed]
8. Smeekens, J. M., *et al.* (2020). Systematic quantification of the dynamics of newly synthesized proteins unveiling their degradation pathways in human cells. *Chem Sci.*, **11 (13)**, 3557-3568. [PubMed]
9. Tao, W.A., *et al.* (2019). Identification and Quantification of Newly Synthesized Proteins Using Mass Spectrometry-Based Chemical Proteomics. *Mass Spectrometry-Based Chemical Proteomics.* [PubMed]
10. Dumont, A. A., *et al.* (2018). ADAP1 limits neonatal cardiomyocyte hypertrophy by reducing integrin cell surface expression. *Sci Rep.*, **8 (1)**, 13605. [PubMed]

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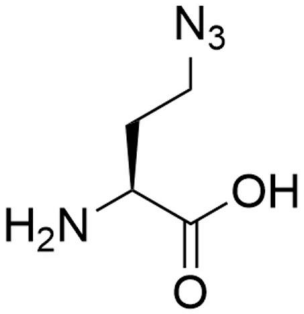
DOCUMENTS

- Safety Data Sheet
- Download CoA
- Datasheet

GALLERY IMAGES



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