Print Date: Mar 26th 2020

Certificate of Analysis

www.tocris.com

Product Name: **L-Azidohomoalanine hydrochloride** **Catalog No.: 6584** **Batch No.: 2**

CAS Number: 942518-29-8

IUPAC Name: (*S*)-2-Amino-4-azidobutanoic acid hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_4H_8N_4O_2.HCl$

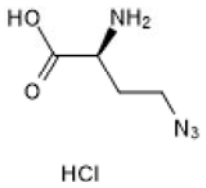
Batch Molecular Weight: 180.59

Physical Appearance: White solid

Solubility: water to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D$ = +23.3 (Concentration = 1, Solvent = Water)

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Information

Product Name: **L-Azidohomoalanine hydrochloride** **Catalog No.: 6584** **Batch No.: 2**

CAS Number: 942518-29-8

IUPAC Name: (*S*)-2-Amino-4-azidobutanoic acid hydrochloride

Description:

Unnatural amino acid. Incorporated into proteins during de novo protein synthesis, with no effect on protein degradation. Requires methionine-free medium for efficient incorporation. Substrate for wild-type methionyl-tRNA synthetase (MetRS) in vivo. Can be used in BONCAT (bio-orthogonal non-canonical amino acid tagging) for the identification of newly synthesized proteins.

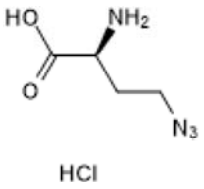
Physical and Chemical Properties:

Batch Molecular Formula: $C_4H_8N_4O_2$.HCl

Batch Molecular Weight: 180.59

Physical Appearance: White solid

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

water to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Wang *et al* (2017) Nonradioactive quantification of autophagic protein degradation with L-azidohomoalanine labeling. Nat.Protoc. ***12*** 279. PMID: 28079880.

Lang & Chin *et al* (2014) Cellular incorporation of unnatural amino acids and bioorthogonal labeling of proteins. Chem.Rev. ***114*** 4764. PMID: 24655057.

Dieterich *et al* (2006) Selective identification of newly synthesized proteins in mammalian cells using bioorthogonal noncanonical amino acid tagging (BONCAT). Proc.Natl.Acad.Sci.U.S.A. ***103*** 9482. PMID: 16769897.