

## Certificate of Analysis

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**Product Name:** L-Azidohomoalanine hydrochloride

**Catalog No.:** 6584

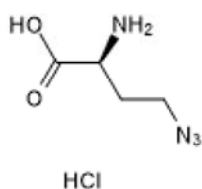
**Batch No.:** 1

CAS Number: 942518-29-8

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

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>4</sub>H<sub>8</sub>N<sub>4</sub>O<sub>2</sub>.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

**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = +30.2 (Concentration = 1, Solvent = Water)

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Unnatural amino acid. Incorporated into proteins during de novo protein synthesis, with no effect on protein degradation. Activated by wild-type methionyl-tRNA synthetase (MetRS) in vivo. Can be used in BONCAT (bioorthogonal non-canonical amino acid tagging) for the identification of newly synthesized proteins.

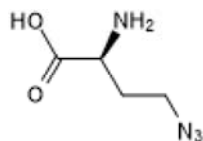
**Physical and Chemical Properties:**

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Batch Molecular Weight: 180.59

Physical Appearance: White solid

**Batch Molecular Structure:**



HCl

**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) *Proc.Natl.Acad.Sci.U.S.A.* **103** 9482. PMID: 16769897.

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