

# **Certificate of Analysis**

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Product Name: AbK Catalog No.: 5113 Batch No.: 1

CAS Number: 1253643-88-7

IUPAC Name:  $N^6$ -[[2-(3-Methyl-3*H*-diazirin-3-yl)ethoxy]carbonyl]-L-lysine

# 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{11}H_{20}N_4O_4$ 

Batch Molecular Weight: 272.3

Physical Appearance: White solid

**Solubility:** water to 10 mM with gentle warming

1eq. HCl to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:

### 2. ANALYTICAL DATA

HPLC: Shows >98.2% purity
Chiral HPLC: Shows 100% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 48.52 7.4 20.58 Found 48.44 7.48 20.54





# **Product Information**

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#### **Description:**

Unnatural amino acid. Acts as a UV light-activated photocrosslinking probe when incorporated into proteins by pyrrolysyl tRNA synthetase/tRNA<sub>CUA</sub> pairs.

### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>11</sub>H<sub>20</sub>N<sub>4</sub>O<sub>4</sub> Batch Molecular Weight: 272.3 Physical Appearance: White solid

Minimum Purity: >98%

#### **Batch Molecular Structure:**

Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

#### Solubility & Usage Info:

water to 10 mM with gentle warming 1eq. HCl 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:

Ai et al (2011) Probing protein-protein interactions with a genetically encoded photo-crosslinking amino acid. Chembiochem 12 1854. PMID: 21678540.

**Lowder** *et al* (2011) Visualizing protein partnerships in living cells and organisms. Curr.Opin.Cell Biol. *15* 781. PMID: 22104179. **Chatterjee** *et al* (2013) Efficient viral delivery system for unnatural amino acid mutagenesis in mammalian cells. Proc.Natl.Acad.Sci.U.S.A. *110* 11803. PMID: 23818609.

