

Certificate of Analysis

Print Date: May 30th 2022

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Product Name: Catalog No.: 6878 Batch No.: 1

CAS Number: 1598424-76-0

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{31}H_{30}N_4O_5.1/4H_2O$

Batch Molecular Weight: 543.1

Physical Appearance:Light brown solidSolubility:DMSO to 100 mMStorage:Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 68.56 5.66 10.32 Found 68.37 5.62 10.36

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

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Product Information

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CAS Number: 1598424-76-0

Description:

BMS 466442 is a potent and selective asc-1 (alanine-serine-cysteine-1) transporter inhibitor (IC $_{50}$ values are 20 and 37 nM in rat primary cortical cultures and HEK cells expressing asc-1 respectively). Displays >1000-fold selectivity for asc-1 over LAT-2 and ASCT-2. This compound is unsuitable for in vivo studies.

Physical and Chemical Properties:

Batch Molecular Formula: C₃₁H₃₀N₄O₅.1/4H₂O

Batch Molecular Weight: 543.1

Physical Appearance: Light brown solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO 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:

Torrecillas et al (2019) Inhibition of the alanine-serine-cysteine-1 transporter by BMS-466442. ACS Chem.Neurosci. **10** 2510. PMID: 30821959.

Brown *et al* (2014) *In vitro* characterization of a small molecule inhibitor of the alanine serine cysteine transporter -1 (SLC7A10). J.Neurochem. *129* 275. PMID: 24266811.

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