



Certificate of Analysis

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Product Name: AUTAC4 Catalog No.: 7699 Batch No.: 1

CAS Number: 2267315-04-6

IUPAC Name: N-[(16R)-16-[[[2-Amino-9-[(4-fluorophenyl)methyl]-6,9-dihydro-6-oxo-1*H*-purin-8-yl]thio]methyl]-15,18-dioxo-4,7,10-

trioxa-14,17-diazanonadec-1-yl]-α-oxo-2-phenyl-1*H*-indole-3-acetamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{43}H_{48}FN_9O_8S.1\frac{1}{4}H_2O$

Batch Molecular Weight: 892.49

Physical Appearance: Pale yellow solid

Solubility: DMSO to 20 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.8% purity **Chiral HPLC:** Shows 99.9% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 57.87 5.7 14.12 Found 57.09 5.42 13.96

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

Product Information

Print Date: Apr 16th 2024

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Description:

AUTAC4 is an autophagy-targeting chimera targeting mitochondria. Comprises p-fluorobenzyl guanine joined by a PEG linker to a 2-phenylindole-3-glyoxyaminde ligand for the translocator protein on the outer mitochondrial membrane. It delivers a guanine tag to the mitochondrial membrane and promotes mitophagy of damaged mitochondria. In Down syndrome cells, AUTAC4 degrades impaired mitochondria and promotes the generation of functionally normal mitochondria.

Physical and Chemical Properties:

Batch Molecular Formula: C₄₃H₄₈FN₉O₈S.1½H₂O

Batch Molecular Weight: 892.49

Physical Appearance: Pale yellow solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 20 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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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.

Licensing Information:

Sold under license from Tohoku Techno Arch.

References:

Takahashi et al (2019) AUTACs: cargo-specific degraders using selective autophagy. Mol.Cell. 76 797. PMID: 31606272.

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