

Certificate of Analysis

Product Name: SMER 28

Catalog No.: 4297

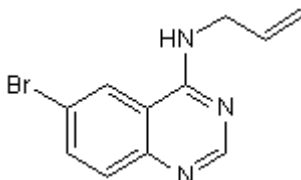
Batch No.: 1

CAS Number: 307538-42-7

IUPAC Name: 6-Bromo-N-2-propenyl-4-quinazolinamine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₁H₁₀BrN₃
Batch Molecular Weight: 264.12
Physical Appearance: Off-white solid
Solubility: DMSO to 100 mM
 ethanol (supplied pre-dissolved in absolute ethanol, 27µg/ml) to 50 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.22 (Ethyl acetate:Petroleum ether [1:4])
HPLC: Shows 99.6% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	50.02	3.82	15.91
Found	49.97	3.91	15.84

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

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Description:

Positive regulator of autophagy in a mechanism independent from the mTOR pathway. Increases autophagosome synthesis and enhances clearance of model autophagy substrates such as mutant huntingtin and A53T α -synuclein, associated with Huntington's and Parkinson's diseases, respectively. Promotes reprogramming of fibroblasts to neural stem-like cells in combination with other chemical reagents.

Physical and Chemical Properties:

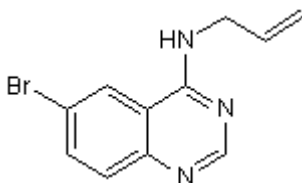
Batch Molecular Formula: C₁₁H₁₀BrN₃

Batch Molecular Weight: 264.12

Physical Appearance: Off-white solid

Minimum Purity: >99%

Batch Molecular Structure:



References:

Zhang et al (2016) Pharmacological reprogramming of fibroblasts into neural stem cells by signaling-directed transcriptional activation. *Cell Stem Cell* **18** 653. PMID: 27133794.

Renna et al (2010) Chemical inducers of autophagy that enhance the clearance of mutant proteins in neurodegenerative diseases. *J.Biol.Chem.* **285** 11061. PMID: 20147746.

Sarkar et al (2010) Small molecules enhance autophagy and reduce toxicity in Huntington's disease models. *Nat.Chem.Biol.* **3** 331. PMID: 17486044.

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol (supplied pre-dissolved in absolute ethanol, 27µg/ml) to 50 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.

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