

Certificate of Analysis

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Product Name: MK6-83

Catalog No.: 5547

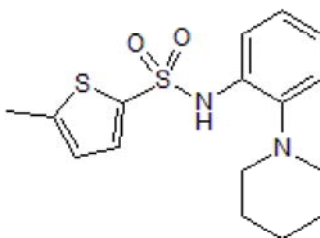
Batch No.: 3

CAS Number: 1062271-24-2

IUPAC Name: 5-Methyl-N-[2-(1-piperidinyl)phenyl]-2-thiophenesulfonamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₆H₂₀N₂O₂S₂
Batch Molecular Weight: 336.47
Physical Appearance: Beige solid
Solubility: DMSO to 100 mM
 ethanol to 10 mM
Storage: Store at +4°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	57.12	5.99	8.33
Found	57.01	5.99	8.32

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

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Description:

MK6-83 is a TRPML channel activator ($EC_{50} = 110$ nM). Also activates F408 Δ and F465L TRPML mutants (EC_{50} values are 0.1 and 1.23 μ M respectively). Restores endolysosomal trafficking and zinc homeostasis in lysosomes of mucopolipidosis type IV (MLIV) mutant fibroblasts.

Physical and Chemical Properties:

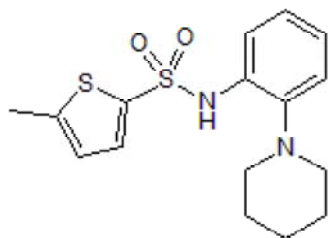
Batch Molecular Formula: C₁₆H₂₀N₂O₂S₂

Batch Molecular Weight: 336.47

Physical Appearance: Beige solid

Minimum Purity: \geq 98%

Batch Molecular Structure:



References:

Chen et al (2014) A small molecule restores function to TRPML1 mutant isoforms responsible for mucopolipidosis type IV. *Nat. Commun.* **5** 4681. PMID: 25119295.

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 10 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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