

Product Data Sheet

Product Name: MK6-83

Cat. No.: GC18564

Chemical Properties

Cas. No. 1062271-24-2

Chemical Name 5-methyl-N-[2-(1-piperidinyl)phenyl]-2-thiophenesulfonamide

SMILES O=S(NC1=CC=CC=C1N2CCCCC2)(C3=CC=C(C)S3)=O

Formula $C_{16}H_{20}N_2O_2S_2$ M.Wt 336.5

Solubility DMF: 30 mg/mL, DMSO: 30 mg/mL, DMSO:PBS (pH 7.2) (1:2): 0.33 mg/mL, Ethanol: 5 mg/mL
Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

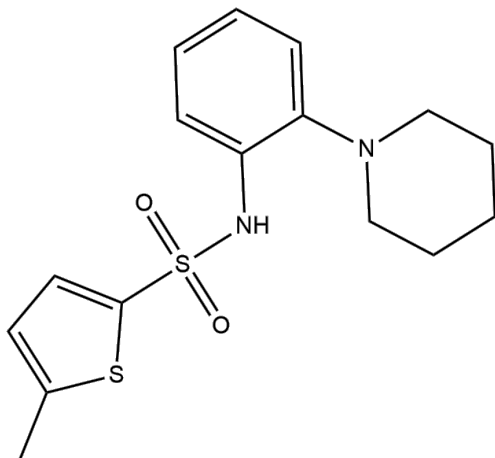
Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Structure



Background

MK6-83 is an activator of the transient receptor potential cation channel, mucolipin subfamily (TRPML1). TRPML1 is mutated in mucopolipidosis type IV (MLIV), a hereditary lysosomal storage disorder characterized by severe delays in intellectual and motor development. MK6-83 increases activity of TRPML1 in lysosomes expressing either wild type or F465L-mutated channels (EC₅₀s = 110 and 100 nM, respectively) and in MLIV patient-derived fibroblasts. It is more effective for F465L mutations than F408Δ (EC₅₀ = 1,230 nM). It also improves zinc trafficking out of lysosomes in F408Δ-expressing fibroblast cells.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA