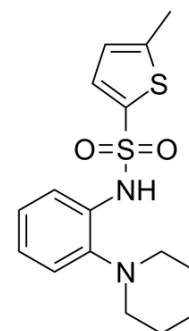


MK6-83

Cat. No.:	HY-110238		
CAS No.:	1062271-24-2		
Molecular Formula:	C ₁₆ H ₂₀ N ₂ O ₂ S ₂		
Molecular Weight:	336.47		
Target:	TRP Channel		
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 5 mg/mL (14.86 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.9720 mL	14.8602 mL	29.7203 mL
	5 mM	0.5944 mL	2.9720 mL	5.9441 mL
	10 mM	0.2972 mL	1.4860 mL	2.9720 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

MK6-83 is a new candidate agonist of TRPML1 with an improved efficacy and potency. MK6-83 has the potential for Mucopolidosis type IV study^[1].

In Vitro

MK6-83 2 ranging from 0.2 to 30 μM shows no signs of cytotoxicity^[1].
 MK6-83 appears to be significantly more efficacious on fibroblast lysosomes isolated from R403C or V446L expressing cells than on those isolated from TRPML1^{-/-} cells^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.
 Cell Viability Assay^[1].

Cell Line:	Lysosomes isolated from fibroblast cell lines derived from MLIV patients carrying either the F408D, the R403C or the V446L mutation ^[1] .
Concentration:	0-10 μM.
Incubation Time:	24 h.

Result:	Efficacious on fibroblast lysosomes isolated from R403C or V446L expressing cells. Had no significant effect on lysosomes isolated from TRPML1 ^{-/-} fibroblasts.
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REFERENCES

[1]. Cheng-Chang Chen, et al. A Small Molecule Restores Function to TRPML1 Mutant Isoforms Responsible for Mucopolipidosis Type IV. Nat Commun. 2014 Aug 14;5:4681.

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

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