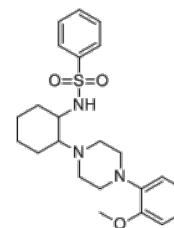


Product Name : ML-SI3
Cat. No. : PC-73173
CAS No. : 891016-02-7
Molecular Formula : C₂₃H₃₁N₃O₃S
Molecular Weight : 429.579
Target : TRP Channel
Solubility : 10 mM in DMSO



Biological Activity

ML-SI3 is a synthetic inhibitor of **TRPML** calcium channel blocker with IC₅₀ of 4.7 μM and 1.7 μM for TRPML1/2 channel respectively.

ML-SI3 blocks CCCP- and H₂O₂-induced autophagosome formation, suppresses CCCP-induced LC3-PARKIN co-localization (mitophagy).

(-)-isomer ML-SI3 is a potent inhibitor of TRPML1 and TRPML2 (IC₅₀ values 1.6 and 2.3 μM) and a weak inhibitor (IC₅₀ 12.5 μM) of TRPML3.

The (+)-enantiomer ML-SI3 is an inhibitor on TRPML1 (IC₅₀ 5.9 μM), but an activator on TRPML 2 and 3.

References

Li D, et al. **Autophagy**. 2021 Apr;17(4):872-887.

Leser C, et al. **Eur J Med Chem**. 2021 Jan 15;210:112966.

Xiaoli Zhang, et al. **Nat Commun**. 2016 Jun 30;7:12109.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com