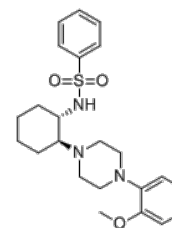


Product Name : (rel)-ML-SI
Cat. No. : PC-73026
CAS No. : 2108567-79-7
Molecular Formula : C₂₃H₃₁N₃O₃S
Molecular Weight : 429.579
Target : TRP Channel
Solubility : 10 mM in DMSO



Biological Activity

(rel)-ML-SI (Mucolipin-specific synthetic inhibitor 3) is a synthetic antagonist of transient receptor potential mucolipin 1 (**TRPML1**), prevents lysosomal calcium efflux and blocks downstream TRPML1-mediated induction of autophagy.

The TRPML1 inhibitor ML-SI3 binds the same cavity as its agonist ML-SA1.

ML-SI3 competes with ML-SA1 to block the channel activity.

ML-SI3 blocks TRPML1 channel activation yet does not inhibit PI(3,5)P2-dependent activation of the channel.

Transient receptor potential mucolipin 1 (TRPML1) regulates lysosomal calcium signaling, lipid trafficking, and autophagy-related processes.

References

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

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

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

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