

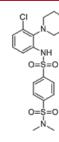
Data Sheet

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 $\begin{tabular}{lll} \textbf{Product Name} & : & ML-SA5 \\ \textbf{Cat. No.} & : & PC-72043 \\ \textbf{CAS No.} & : & 2418670-70-7 \\ \textbf{Molecular Formula} & : & $C_{19}H_{24}ClN_3O_4S_2$ \\ \end{tabular}$

Molecular Weight: 457.988Target: TRP ChannelSolubility: 10 mM in DMSO



Biological Activity

ML-SA5 (TRPML1 agonist ML-SA5) is a potent, small molecule agonist of transient receptor potential mucolipin 1 (**TRPML1**/MCOLN1/ML1), dose-dependently activated whole-endolysosomal ML1 currents in DMD myoblasts with EC50 of 285±144 nM.

ML-SA5-induced lysosomal Ca2+ release, measured with GCaMP3 imaging, in primary myotubes isolated from ML1MCK mice.

ML-SA5 ML1 agonist ML-SA5 ameliorate muscular dystrophies, facilitates sarcolemma repair to reduce muscle damage, activates TFEB to correct lysosomal insufficiency in mdx mice.

References

Lu Yu, et al. *Sci Adv.* 2020 Feb 7;6(6):eaaz2736.

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

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