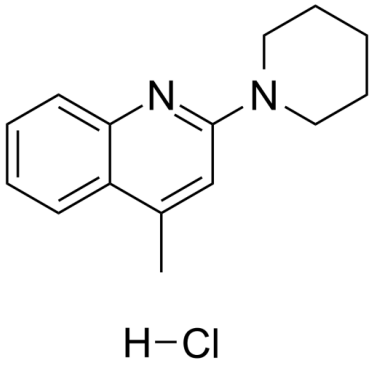
Data Sheet

Product Name:	ML204 (hydrochloride)
Cat. No.:	CS-5790
CAS No.:	2070015-10-8
Molecular Formula:	C15H19ClN2
Molecular Weight:	262.78
Target:	TRP Channel
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Solubility:	H2O : ≥ 30 mg/mL (114.16 mM)



BIOLOGICAL ACTIVITY:

ML204 hydrochloride is a novel, potent, selective TRPC4 channel inhibitor with IC50 of 0.96 uM. exhibit 19-fold selectivity against TRPC6 channels in similar fluorescent assays. target: ML204 IC50: 0.96 uM In vitro: ML204 inhibited TRPC4β-mediated intracellular Ca2+ rise. ML204 at 10 μm showed >50% inhibition in only 7 of 68 binding assays for 68 GPCRs, ion channels, and transporters.[1] ML204 afforded good selectivity (19-fold) against TRPC6 channels and more modest selectivity against TRPC3 and TRPC5 (9-fold) channels. [2] In vivo: The selectivity of ML204 show no appreciable block by 10-20 μm ML204 of TRPV1, TRPV3, TRPA1, and TRPM8, as well as KCNQ2 and native voltage-gated sodium, potassium, and calcium channels in mouse dorsal root ganglion neurons.[1]

References:

[1]. Miller M, et al. Identification of ML204, a novel potent antagonist that selectively modulates native TRPC4/C5 ion channels. J Biol Chem. 2011 Sep 23;286(38):33436-46.

[2]. Miller MR, et al. Novel Chemical Inhibitor of TRPC4 Channels. Probe Reports from the NIH Molecular Libraries Program.

CAIndexNames:

Quinoline, 4-methyl-2-(1-piperidinyl)-,hydrochloride

SMILES:

CC1=CC(N2CCCCC2)=NC3=CC=CC=C13.Cl[H]

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

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