

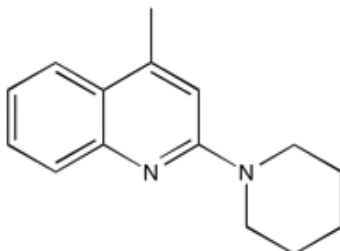
Catalog # 10-2841

ML204

CAS# 5465-86-1

4-Methyl-2-(1-piperidinyl)quinoline

Lot # X106123



Selective blocker of TRPC4 channels ($IC_{50} = 0.96 - 2.6 \mu\text{M}$, depending on assay). Displays 19-fold selectivity against TRPC6 and 9-fold selectivity against TRPC5. Has no significant activity at TRPV1, TRPV3, TRPA1 and TRPM8 channels at concentrations up to $22 \mu\text{M}$. A useful tool for exploring the involvement of TRPC and TRPC-like channels in cellular signaling and physiology.²⁻⁴

- 1) Miller *et al.* (2011), *Identification of ML204, a novel potent antagonist that selectively modulates native TRPC4/C5 ion channels*; J. Biol. Chem., **286** 33436
- 2) Zhang *et al.* (2013), *GIRK-like and TRPC-like conductances mediate thyrotropin-releasing hormone-induced increases in excitability in thalamic paraventricular nucleus neurons*; Neuropharmacology, **72** 106
- 3) Zhang *et al.* (2016), *Endocannabinoid 2-AG and intracellular cannabinoid receptors modulate a low-threshold calcium spike-induced slow depolarizing afterpotential in rat thalamic paraventricular nucleus neurons*; Neuroscience, **322** 308
- 4) Zhao *et al.* (2015), *TRP Channels Localize to Subdomains of the Apical Plasma Membrane in Human Retal Retinal Pigment Epithelium*; Invest. Ophthalmol. Vis. Sci., **56** 1916

PHYSICAL DATA

Molecular Weight:	226.32
Molecular Formula:	$\text{C}_{15}\text{H}_{18}\text{N}_2$
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 20 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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