

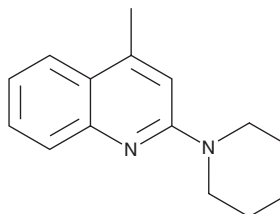
# PRODUCT INFORMATION



## ML-204

Item No. 15626

**CAS Registry No.:** 5465-86-1  
**Formal Name:** 4-methyl-2-(1-piperidinyl)-quinoline  
**Synonyms:** CID-230710, 2-piperidino-Lepidine, NSC 25850  
**MF:** C<sub>15</sub>H<sub>18</sub>N<sub>2</sub>  
**FW:** 226.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 212, 252, 278, 352 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

ML-204 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-204 in the solvent of choice, which should be purged with an inert gas. ML-204 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ML-204 in ethanol and DMSO is approximately 15 mg/ml and approximately 30 mg/ml in DMF.

ML-204 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ML-204 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. ML-204 has a solubility of approximately 0.33 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

ML-204 selectively blocks transient receptor potential canonical 4 (TRPC4) channels (IC<sub>50</sub>s = 0.96 and 2.6 μM in fluorescent and electrophysiological assays, respectively).<sup>1</sup> It exhibits 19-fold selectivity against TRPC6 and 9-fold selectivity against TRPC5 and does not affect TRPV1, TRPV3, TRPA1, or TRPM8 channels at concentrations up to 22 μM.<sup>1</sup>

### Reference

1. Miller, M., Shi, J., Zhu, Y., *et al.* Identification of ML204, a novel potent antagonist that selectively modulates native TRPC4/C5 ion channels. *J. Biol. Chem.* **286**(38), 33436-33446 (2011)

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM