Print Date: May 9th 2013

Certificate of Analysis

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Product Name: ML 204 **Catalog No.: 4732** **Batch No.: 1**

CAS Number: 5465-86-1

IUPAC Name: 4-Methyl-2-(1-piperidinyl)quinoline

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{18}N_2$

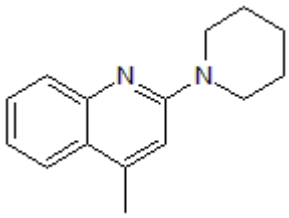
Batch Molecular Weight: 226.32

Physical Appearance: Off-white solid

Solubility: DMSO to 100 mM
1eq. HCl to 25 mM with gentle warming

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.42 (Ethyl acetate:Petroleum ether [3:7])

HPLC: Shows 100% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	79.61	8.02	12.38
Found	79.37	8.05	12.53

Product Information

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IUPAC Name: 4-Methyl-2-(1-piperidinyl)quinoline

Description:

Blocker of TRPC4 channels (IC_{50} values are 0.96 and 2.6 μM in fluorescent and electrophysiological assays, respectively). Exhibits 19-fold selectivity against TRPC6 and 9-fold selectivity against TRPC5; displays no significant activity at TRPV1, TRPV3, TRPA1 and TRPM8 channels at concentrations up to 22 μM.

Physical and Chemical Properties:

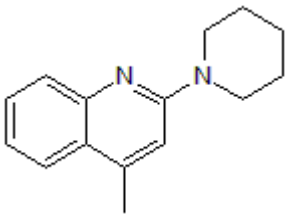
Batch Molecular Formula: $C_{15}H_{18}N_2$

Batch Molecular Weight: 226.32

Physical Appearance: Off-white solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM
1eq. HCl to 25 mM with gentle warming

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Miller *et al* (2011) Novel chemical inhibitor of TRPC4 channels. Probe Reports from the Molecular Libraries Program. PMID: 22049577.

Miller *et al* (2011) Identification of ML204, a novel potent antagonist that selectively modulates native TRPC4/5 ion channels. J.Biol.Chem. ***286*** 33436. PMID: 21795696.