

Certificate of Analysis

Print Date: Dec 11th 2018

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Product Name: 9-Phenanthrol Catalog No.: 4999 Batch No.: 2

CAS Number: 484-17-3

IUPAC Name: 9-Hydroxyphenanthrene

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:C14H10OBatch Molecular Weight:194.23Physical Appearance:Brown solid

Solubility: DMSO to 100 mM

ethanol to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 97.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 86.57 5.19 Found 86.36 5.11



Product Information

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CAS Number: 484-17-3

IUPAC Name: 9-Hydroxyphenanthrene

Description:

Selective TRPM4 blocker (IC_{50} = 20 μ M in HEK293 cells). Exhibits no effect on CFTR or TRPM5 (at 0.25 and 1 mM respectively). Abolishes arrhythmias induced by hypoxia in a mouse heart model.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₄H₁₀O Batch Molecular Weight: 194.23 Physical Appearance: Brown solid

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM ethanol to 100 mM

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:

Simard *et al* (2012) Transient receptor potential melastatin 4 inhibitor 9-phenanthrol abolishes arrhythmias induced by hypoxia and reoxygenation in mouse ventricle. Br.J.Pharmacol. *165* 2354. PMID: 22014185.

Grand *et al* (2008) 9-phenanthrol inhibits human TRPM4 but not TRPM5 cationic channels. Br.J.Pharmacol. *153* 1697. PMID: 18297105.