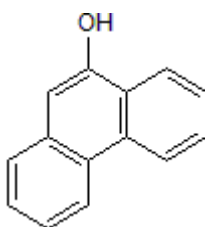


Product Name: 9-Phenanthrol
CAS Number: 484-17-3
IUPAC Name: 9-Hydroxyphenanthrene

Catalog No.: 4999 **Batch No.:** 1

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₄H₁₀O.¼H₂O
Batch Molecular Weight: 198.73
Physical 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 95% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	84.61	5.33	
Found	84.84	5.17	

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: 9-Phenanthrol

Catalog No.: 4999

Batch No.: 1

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.

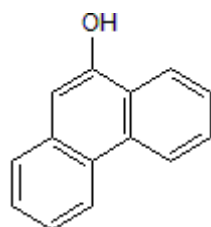
Physical and Chemical Properties:

Batch Molecular Formula: $C_{14}H_{10}O \cdot \frac{1}{4}H_2O$

Batch Molecular Weight: 198.73

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:

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

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

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