

**Product Name:** Mesopram

**Catalog No.:** 3053

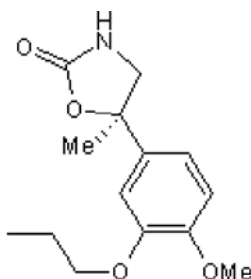
**Batch No.:** 1

CAS Number: 189940-24-7

IUPAC Name: (R)-5-(4-Methoxy-3-propoxyphenyl)-5-methyl-2-oxazolidinone

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>14</sub>H<sub>19</sub>NO<sub>4</sub>  
**Batch Molecular Weight:** 265.31  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 100 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.44 (Ethyl acetate:Petroleum ether [1:1])  
**HPLC:** Shows 98.8% purity  
**Chiral HPLC:** Shows 98.2% purity  
<sup>1</sup>H NMR: Consistent with structure  
 Mass Spectrum: Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = -55.4 (Concentration = 1.0, Solvent = Chloroform)  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	63.38	7.2	5.28
Found	63.53	7.14	5.41

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

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IUPAC Name: (R)-5-(4-Methoxy-3-propoxyphenyl)-5-methyl-2-oxazolidinone

**Description:**

Orally active phosphodiesterase (PDE) 4 inhibitor. Inhibits Th1 cell proliferation and decreases production of IFN- $\gamma$ , TNF- $\alpha$ , IL-10 and iNOS in vitro. Triggers ovulation and exhibits efficacy against experimental autoimmune encephalomyelitis and murine colitis in vivo.

**Physical and Chemical Properties:**

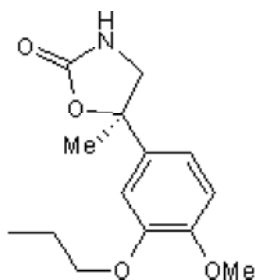
Batch Molecular Formula: C<sub>14</sub>H<sub>19</sub>NO<sub>4</sub>

Batch Molecular Weight: 265.31

Physical Appearance: White solid

**Minimum Purity:**  $\geq$ 98%

**Batch Molecular Structure:**



**References:**

**McKenna et al** (2005) Pharmacological inhibition of phosphodiesterase 4 triggers ovulation in follicle-stimulating hormone-primed rats. *Endocrinology* **146** 208. PMID: 15448112.

**Loher et al** (2003) The specific type-4 phosphodiesterase inhibitor mesopram alleviates experimental colitis in mice. *J.Pharmacol.Exp.Ther.* **305** 549. PMID: 12606674.

**Dinter et al** (2000) The type IV phosphodiesterase specific inhibitor mesopram inhibits experimental autoimmune encephalomyelitis in rodents. *J.Neuroimmunol.* **108** 136. PMID: 10900347.

**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.

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