

Product Name: (±)-PPCC oxalate

Catalog No.: 3870

Batch No.: 1

CAS Number: 1781628-91-8

IUPAC Name: (1*R*,2*S*)-*rel*-2-[(4-Hydroxy-4-phenyl-1-piperidinyl)methyl]-1-(4-methylphenyl)-cyclopropanecarboxylic acid methyl ester oxalate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₄H₂₉NO₃·C₂H₂O₄

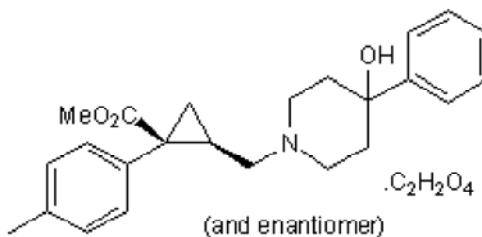
Batch Molecular Weight: 469.53

Physical Appearance: White solid

Solubility: DMSO to 100 mM
ethanol to 10 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.8% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	66.51	6.65	2.98
Found	66.52	6.59	3.19

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

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Description:

(±)-PPCC oxalate is a selective sigma (σ) receptor ligand. Displays high affinity for σ_1 ; also binds at σ_2 sites (K_i = 1.5 nM and 50.8 nM respectively). Selective over a range of receptor types including dopaminergic and muscarinic receptors, DAT and SERT.

Physical and Chemical Properties:

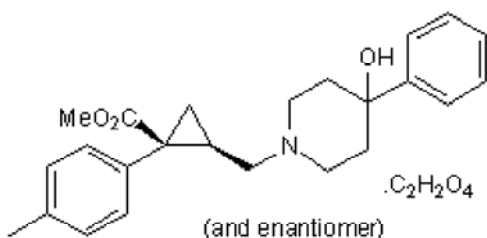
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Batch Molecular Weight: 469.53

Physical Appearance: White solid

Minimum Purity: ≥99%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 10 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:

Antonini et al (2009) Anti-amnesic properties of (±)-PPCC, a novel sigma receptor ligand, on cognitive dysfunction induced by selective cholinergic lesion in rats. *J.Neurochem.* **109** 744. PMID: 19245662.

Prezavento et al (2008) A new sigma ligand, (±)-PPCC, antagonizes kappa opioid receptor-mediated antinociceptive effect. *Life Sci.* **82** 549. PMID: 18261749.

Prezavento et al (2007) Novel sigma receptor ligands: synthesis and biological profile. *J.Med.Chem.* **50** 951. PMID: 17328523.

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