

Product Name: Pimavanserin

Catalog No.: 7667

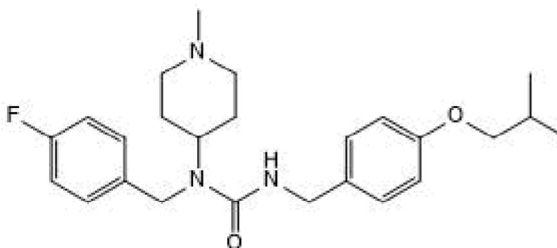
Batch No.: 2

CAS Number: 706779-91-1

IUPAC Name: *N*-[[4-(4-Fluorophenyl)methyl]-*N*-(1-methyl-4-piperidinyl)-*N'*-[[4-(2-methylpropoxy)phenyl]methyl]urea

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₅H₃₄FN₃O₂.
Batch Molecular Weight: 427.56
Physical Appearance: White solid
Solubility: DMSO to 50 mM
 ethanol to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.9% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	70.23	8.02	9.83
Found	70.34	8.07	9.81

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

Product Name: Pimavanserin

Catalog No.: 7667

2

CAS Number: 706779-91-1

IUPAC Name: *N*-[[4-(4-Fluorophenyl)methyl]-*N'*-(1-methyl-4-piperidinyl)-*N''*-[[4-(2-methylpropoxy)phenyl]methyl]urea

Description:

Pimavanserin (also known as ACP-103) is a selective, potent 5-HT_{2A} receptor inverse agonist (IC₅₀ = 2 nM). Pimavanserin displays ~ 40-fold higher affinity for 5-HT_{2A} over 5-HT_{2C} receptor. Chronic administration of Pimavanserin, suppresses amyloid-β production and improves anxiety-related behavior and memory in Alzheimer's disease mouse models. Pimavanserin shows protective effects on midbrain dopaminergic neurons in a rat model of Parkinson's Disease.

Physical and Chemical Properties:

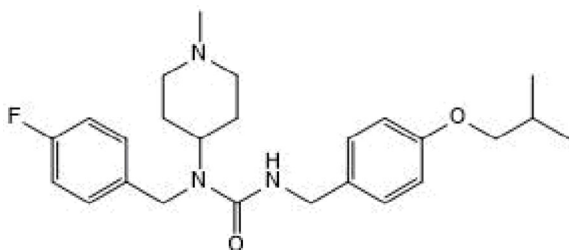
Batch Molecular Formula: C₂₅H₃₄FN₃O₂.

Batch Molecular Weight: 427.56

Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 50 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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Gras Lavigne et al (2021) Pimavanserin promotes trophic factor release and protects cultured primary dopaminergic neurons exposed to MPP⁺ in a GDNF-dependent manner. *ACS Chem.Neurosci.* **12** 2088. PMID: 34032411.

Yuede et al (2021) Pimavanserin, a 5HT 2A receptor inverse agonist, rapidly suppresses Aβ production and related pathology in a mouse model of Alzheimer's disease. *J.Neurochem.* **156** 658. PMID: 33278025.

Snigdha et al (2010) Attenuation of phencyclidine-induced object recognition deficits by the combination of atypical antipsychotic drugs and pimavanserin (ACP 103), a 5-hydroxytryptamine(2A) receptor inverse agonist. *J.Pharmacol.Exp.Ther.* **332** 622. PMID: 19864614.

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956