

Certificate of Analysis

Product Name: JZL 195

Catalog No.: 4715

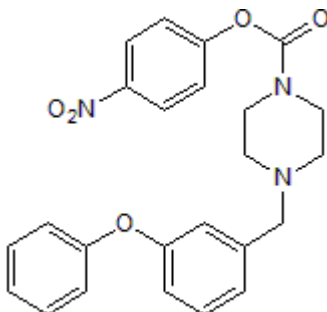
Batch No.: 1

CAS Number: 1210004-12-8

IUPAC Name: 4-[(3-Phenoxyphenyl)methyl]-1-piperazinecarboxylic acid 4-nitrophenyl ester

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₄H₂₃N₃O₅
Batch Molecular Weight: 433.46
Physical Appearance: White solid
Solubility: DMSO to 50 mM
 ethanol to 5 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.38 (Ethyl acetate:Petroleum ether [3:7])
HPLC: Shows 99.6% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	66.5	5.35	9.69
Found	66.47	5.36	9.81

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

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Description:

Dual inhibitor of fatty acid amide hydrolase (FAAH) and monoacylglycerol lipase (MAGL) (IC_{50} values are 2 and 4 nM respectively). Elevates anandamide and 2-arachidonoylglycerol levels in vivo. Shown to impair short-term memory in mice.

Physical and Chemical Properties:

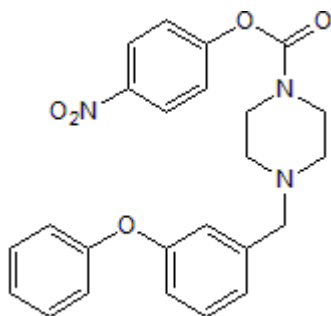
Batch Molecular Formula: $C_{24}H_{23}N_3O_5$

Batch Molecular Weight: 433.46

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Long et al (2009) Dual blockade of FAAH and MAGL identifies behavioral processes regulated by endocannabinoid crosstalk in vivo. *Proc.Natl.Acad.Sci.USA* **106** 20270. PMID: 19918051.

Wiskerke et al (2012) Characterization of the effects of reuptake and hydrolysis inhibitor on interstitial endocannabinoid levels in the brain: an in vivo microdialysis study. *ACS Chem.Neurosci.* **3** 407. PMID: 22860210.

Wise et al (2012) Dual fatty acid amide hydrolase and monoacylglycerol lipase blockade produces THC-like Morris water maze deficits in mice. *ACS Chem.Neurosci.* **3** 369. PMID: 22860205.

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 50 mM

ethanol to 5 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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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