

Certificate of Analysis

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Product Name: JW 642

Catalog No.: 4906

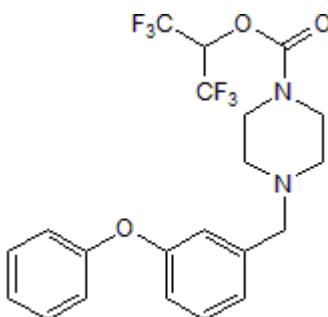
Batch No.: 1

CAS Number: 1416133-89-5

IUPAC Name: 4-[(3-Phenoxyphenyl)methyl]-1-piperazinecarboxylic acid 2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₂₀F₆N₂O₃
Batch Molecular Weight: 462.39
Physical Appearance: White solid
Solubility: DMSO to 100 mM
ethanol to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows >99.7% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	54.55	4.36	6.06
Found	54.74	4.35	6.16

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

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Description:

Potent and selective monoacylglycerol lipase (MAGL) inhibitor ($IC_{50} = 3.7$ nM). Displays >1000-fold selectivity for MAGL over fatty acid amide hydrolase ($IC_{50} = 20.6$ μ M). Analog of JZL 195 (Cat. No. 4715).

Physical and Chemical Properties:

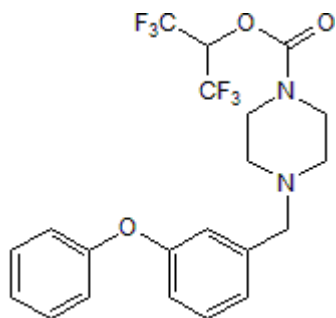
Batch Molecular Formula: $C_{21}H_{20}F_6N_2O_3$

Batch Molecular Weight: 462.39

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Chang et al (2012) Highly selective inhibitors of monoacylglycerol lipase bearing a reactive group that is bioisosteric with endocannabinoid substrates. *Chem.Biol.* **19** 579. PMID: 22542104.

Storage: Store at -20°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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