

**Product Name:** PF 04457845

**Catalog No.:** 6374

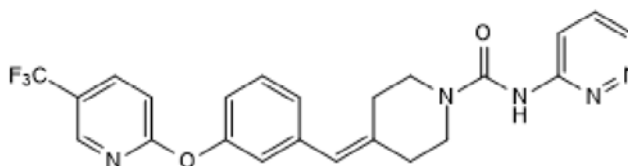
**Batch No.:** 1

CAS Number: 1020315-31-4

IUPAC Name: *N*-3-Pyridazinyl-4-[[[3-[[[5-(trifluoromethyl)-2-pyridinyl]oxy]phenyl]methylene]-1-piperidinecarboxamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Formula:</b>	C <sub>23</sub> H <sub>20</sub> F <sub>3</sub> N <sub>5</sub> O <sub>2</sub>
<b>Batch Molecular Weight:</b>	455.43
<b>Physical Appearance:</b>	Off White solid
<b>Solubility:</b>	DMSO to 100 mM ethanol to 20 mM
<b>Storage:</b>	Store at +4°C
<b>Batch Molecular Structure:</b>	



## 2. ANALYTICAL DATA

<b>HPLC:</b>	Shows 98.8% purity
<b><sup>1</sup>H NMR:</b>	Consistent with structure
<b>Mass Spectrum:</b>	Consistent with structure

<b>Microanalysis:</b>	Carbon Hydrogen Nitrogen		
Theoretical	60.66	4.43	15.38
Found	60.63	4.39	15.24

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

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**Description:**

PF 04457845 is a potent and selective irreversible FAAH inhibitor ( $IC_{50} = 7.2$  nM, which is selective for FAAH over a panel of other serine hydrolases. PF 04457845 exhibits efficacy in a rat inflammatory pain model, and is orally bioavailable and brain penetrant.

**Physical and Chemical Properties:**

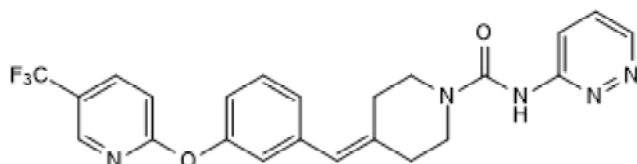
Batch Molecular Formula:  $C_{23}H_{20}F_3N_5O_2$

Batch Molecular Weight: 455.43

Physical Appearance: Off White solid

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

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 20 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.

**Licensing Information:**

Sold for research purposes under agreement from Pfizer Inc

**References:**

**Ahn et al (2011)** Mechanistic and pharmacological characterization of PF-04457845: a highly potent and selective fatty acid amide hydrolase inhibitor that reduces inflammatory and noninflammatory pain. *J.Pharmacol.Exp.Ther.* **338** 114. PMID: 21505060.

**Johnson et al (2011)** Discovery of PF-04457845: a highly potent, orally bioavailable, and selective urea FAAH inhibitor. *ACS Med.Chem.Lett.* **2** 91. PMID: 21666860.

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