

## Certificate of Analysis

[www.tocris.com](http://www.tocris.com)

**Product Name:** PF 3845

**Catalog No.:** 4175

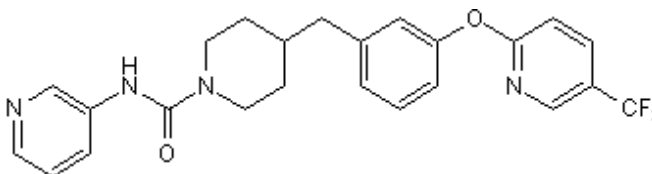
**Batch No.:** 2

CAS Number: 1196109-52-0

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

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>24</sub>H<sub>23</sub>F<sub>3</sub>N<sub>4</sub>O<sub>2</sub>  
**Batch Molecular Weight:** 456.46  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 50 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.6 (Chloroform:Methanol [9:1])  
**HPLC:** Shows 99.5% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	63.15	5.08	12.27
Found	63.13	5.08	12.26

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

**Product Name:** PF 3845

**Catalog No.:** 4175

**Batch No.:** 2

CAS Number: 1196109-52-0

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

**Description:**

Selective fatty acid amide hydrolase (FAAH) inhibitor ( $K_i = 0.23 \mu\text{M}$ ). Reduces inflammatory pain via a cannabinoid receptor-dependent mechanism. Highly efficacious and selective in vivo. Displays no activity at FAAH-2 ( $IC_{50} >10 \mu\text{M}$ ).

**Physical and Chemical Properties:**

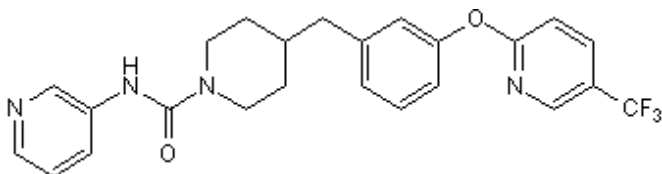
Batch Molecular Formula:  $C_{24}H_{23}F_3N_4O_2$

Batch Molecular Weight: 456.46

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM  
ethanol to 50 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:**

Ahn *et al* (2009) Discovery and characterization of a highly selective FAAH inhibitor that reduces inflammatory pain. *Chem.Biol.* **16** 411. PMID: 19389627.

Ahn *et al* (2009) Fatty acid amide hydrolase as a potential therapeutic target for the treatment of pain and CNS disorders. *Expert Opin.Drug Discov.* **4** 763. PMID: 20544003.

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