

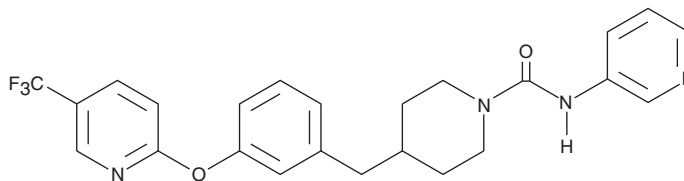
# PRODUCT INFORMATION



## PF-3845

Item No. 13279

**CAS Registry No.:** 1196109-52-0  
**Formal Name:** N-3-pyridinyl-4-[[3-[[5-(trifluoromethyl)-2-pyridinyl]oxy]phenyl]methyl]-1-piperidinecarboxamide  
**MF:** C<sub>24</sub>H<sub>23</sub>F<sub>3</sub>N<sub>4</sub>O<sub>2</sub>  
**FW:** 456.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 203, 241, 273 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

PF-3845 is supplied as a crystalline solid. A stock solution may be made by dissolving the PF-3845 in the solvent of choice, which should be purged with an inert gas. PF-3845 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of PF-3845 in these solvents is approximately 20 mg/ml.

PF-3845 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PF-3845 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. PF-3845 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Fatty acid amide hydrolase (FAAH) degrades N-acyl ethanolamines (NAEs), including the endocannabinoid arachidonoyl ethanolamide (AEA). PF-3845 is a potent, selective, and irreversible inhibitor of FAAH (K<sub>i</sub> = 0.23 μM).<sup>1</sup> It covalently binds FAAH on Ser<sup>241</sup> at the catalytic site, resulting in prolonged elevation of AEA in the brain and plasma in rats after treatment.<sup>1</sup> PF-3845 significantly and persistently reduces inflammatory pain in rats through a cannabinoid receptor-dependent mechanism.<sup>1</sup>

### Reference

1. Ahn, K., Johnson, D.S., Mileni, M., *et al.* Discovery and characterization of a highly selective FAAH inhibitor that reduces inflammatory pain. *Chem. Biol.* **16(4)**, 411-420 (2009).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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