

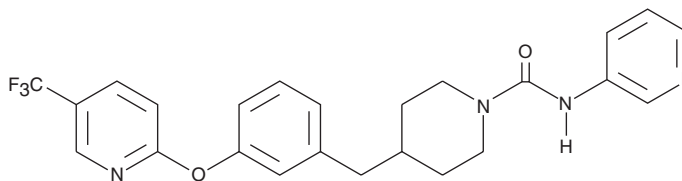
# Product Information



## 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%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid



### Laboratory Procedures

For long term storage, we suggest that PF-3845 be stored as supplied at -20°C. It should be stable for at least two years. PF-3845 is supplied as a crystalline solid. A stock solution may be made by dissolving the PF-3845 in the solvent of choice. PF-3845 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. 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.

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 ( $K_i = 0.23 \mu\text{M}$ ).<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. *Chemistry and Biology* **16**, 411-420 (2009).

### Related Products

URB597 - Item No. 10046 • Arachidonoyl Ethanolamide - Item No. 90050 • Fatty Acid Amide Hydrolase Polyclonal Antibody - Item No. 101600 • FAAH Inhibitor Screening Assay Kit - Item No. 10005196 • JP83 - Item No. 10008660 • JP104 - Item No. 10008661 • Fatty Acid Amide Hydrolase (human recombinant) - Item No. 10010183 • PF-622 - Item No. 10010907 • PF-750 - Item No. 10010908

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

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Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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