PRODUCT INFORMATION



PF-04457845

Item No. 19306

CAS Registry No.:	1020315-31-4			
Formal Name:	N-3-pyridazinyl-4-[[3-[[5-(trifluoromethyl)-	\wedge	\sim	\sim
	2-pyridinyl]oxy]phenyl]methylene]-1-		$\gamma_{1} \gamma_{2} \gamma_{3}$	
	piperidinecarboxamide		N.	
MF:	$C_{23}H_{20}F_{3}N_{5}O_{2}$			CF3
FW:	455.4			
Purity:	≥98%	N H		
UV/Vis.:	λ_{max} : 243 nm			
Supplied as:	A crystalline solid			
Storage:	-20°C	N/		
Stability:	≥4 years			
Information represents the product specifications. Batch specific analytical results are provided on each cartificate of analysis				

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Laboratory Procedures

PF-04457845 is supplied as a crystalline solid. A stock solution may be made by dissolving the PF-04457845 in the solvent of choice, which should be purged with an inert gas. PF-04457845 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of PF-04457845 in these solvents is approximately 5, 20, and 25 mg/ml, respectively.

PF-04457845 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PF-04457845 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. PF-04457845 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

PF-04457845 is an orally active, irreversible inhibitor of fatty acid amide hydrolase (FAAH; IC₅₀ = 7.2 nM) that is selective against other serine hydrolases.¹ It is a covalent inhibitor that carbamylates the active site serine nucleophile of FAAH.¹ In a rat model of inflammatory pain, oral administration of 0.1 mg/kg PF-04457845 has been shown to reduce inflammatory pain with efficacy comparable to that of naproxen.¹

References

1. Johnson, D.S., Stiff, C., Lazerwith, S.E., et al. Discovery of PF-04457845: A highly potent, orally bioavailable, and selective urea FAAH inhibitor. ACS Med. Chem. Lett. 2(2), 91-96 (2011).

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

SAFFTY 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.

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1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM