Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

PF-3845

Catalog No: tcsc0419

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
1196109-52-0

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

Pathway:
Neuronal Signaling;Metabolic Enzyme/Protease

Target:
FAAH;FAAH

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 100 mg/mL (219.08 mM)

Observed Molecular Weight:
456.46

Product Description

PF-3845 is a selective fatty acid amide hydrolase (FAAH) inhibitor (Ki = 0.23 μM); showing negligible activity against FAAH2.

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IC50 value: 0.23 uM

Target: FAAH

PF-3845 selectively inhibits FAAH by carbamylating FAAH\'s serine nucleophile [1]. PF-3845 treated mice (10 mg/kg, i.p.) shows rapid and complete inactivation of FAAH in the brain, as judged by competitive activity-based protein profiling (ABPP) with the serine hydrolase-directed probe fluorophosphonate (FP)-rhodamine. PF-3845 shows a long duration of action up to 24 hour. PF-3845-treated mice also shows dramatic (>10-fold) elevation in brain levels of AEA and other NAEs (N-pamitoyl ethanolamine [PEA] and N-oleoyl ethanolamine [OEA]). FAAH is AEA-degrading enzyme fatty acid amide hydrolase. PF-3845 (1–30 mg/kg, oral administration [p.o.]) causes a dose dependent inhibition of mechanical allodynia with a minimum effective dose (MED) of 3 mg/kg (rats are analyzed at 4 hour post dosing with PF-3845). At higher doses (10 and 30 mg/kg), PF-3845 inhibits pain responses to an equivalent, if not greater, degree than the nonsteroidal anti-inflammatory drug naproxen (10mg/kg, p.o.) [1]. PF-3845 (10 mg/kg, i.p.) significantly reverses LPS-induced tactile allodynia, but doesn\'t modify paw withdrawal thresholds in the saline-injected paw [2].