

Certificate of Analysis

Print Date: Mar 3rd 2023

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PF 04418948 **Product Name:** Catalog No.: 4818 Batch No.: 2

CAS Number: 1078166-57-0

IUPAC Name: 1-(4-Fluorobenzoyl)-3-[[(6-methoxy-2-naphthalenyl)oxy]methyl]-3-azetidinecarboxylic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

 $C_{23}H_{20}FNO_5$ **Batch Molecular Formula: Batch Molecular Weight:** 409.41 **Physical Appearance:** White solid

DMSO to 100 mM Solubility: Store at -20°C Storage:

Batch Molecular Structure:

$$CO_2H$$

2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 67.48 4.92 3.42 Found 67.18 3.42 4.97

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Product Information

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IUPAC Name: 1-(4-Fluorobenzoyl)-3-[[(6-methoxy-2-naphthalenyl)oxy]methyl]-3-azetidinecarboxylic acid

Description:

PF 04418948 is a potent prostaglandin E receptor 2 antagonist (PTGER2; EP2; IC $_{50}$ = 16 nM for human EP $_2$ receptors), which displays over 2000-fold selectivity for EP $_2$ receptors over EP $_1$, EP $_3$, EP $_4$, DP $_1$ amd CRTH $_2$ receptors and exhibits <30% binding at a diverse panel of GPCRs and ion channels at a concentration of 10 μ M. PF 04418948 inhibits PGE $_2$ -induced increases in intracellular cAMP in vitro and reverses PGE $_2$ -invoked relaxation of mouse trachea (IC $_{50}$ = 2.7 nM).

Physical and Chemical Properties:

Batch Molecular Formula: C₂₃H₂₀FNO₅ Batch Molecular Weight: 409.41 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 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.

Licensing Information:

Sold for research purposes under agreement from Pfizer Inc.

References:

Birrell *et al* (2013) Selectivity profiling of the novel EP₂ receptor antagonist, PF-04418948, in functional bioassay systems: atypical affinity at the guinea pig EP₂ receptor. Br.J.Pharmacol. *168* 129. PMID: 22747912.

af Forselles et al (2011) In vitro and in vivo characterization of PF-04418948, a novel, potent and selective prostaglandin EP₂ receptor antagonist. Br.J.Pharmacol. **164** 1847. PMID: 21595651.

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