

PF-04418948

## Chemical Properties

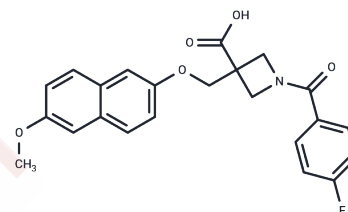
CAS No. : 1078166-57-0

Formula: C<sub>23</sub>H<sub>20</sub>FNO<sub>5</sub>

Molecular Weight: 409.41

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	PF-04418948 is a potent EP2 receptor antagonist (IC <sub>50</sub> = 16 nM for human EP2 receptors). Displays over 2000-fold selectivity for EP2 receptors over EP1, EP3, EP4, DP1 and CRTH2 receptors; exhibits <30% binding at a diverse panel of GPCRs and ion channels at a concentration of 10 μM. Inhibits PGE2-induced increases in intracellular cAMP; reverses PGE2-invoked relaxation of mouse trachea (IC <sub>50</sub> = 2.7 nM).
Targets(IC50)	Prostaglandin Receptor

## Solubility Information

Solubility	DMSO: 120 mg/mL (293.1 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (24.43 mM), Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (24.43 mM), Solution. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4425 mL	12.2127 mL	24.4254 mL
5 mM	0.4885 mL	2.4425 mL	4.8851 mL
10 mM	0.2443 mL	1.2213 mL	2.4425 mL
50 mM	0.0489 mL	0.2443 mL	0.4885 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

af Forselles KJ, et al. In vitro and in vivo characterization of PF-04418948, a novel, potent and selective prostaglandin EP2 receptor antagonist. *Br J Pharmacol.* 2011 Dec;164(7):1847-1856

Lu W, Yu W, He J, et al. Reprogramming immunosuppressive myeloid cells facilitates immunotherapy for colorectal cancer. *EMBO Molecular Medicine.* 2020: e12798.

Xiang X, Wang K, Zhang H, et al. Blocking CX3CR1+ Tumor-associated Macrophages Enhances the Efficacy of Anti-PD-1 Therapy in Hepatocellular Carcinoma. *Cancer Immunology Research.* 2024

Birrell MA, et al. *Br J Pharmacol.* 2013 Jan;168(1):129-38.

Lu W, Yu W, He J, et al. Reprogramming immunosuppressive myeloid cells facilitates immunotherapy for colorectal cancer[J]. *EMBO Molecular Medicine.* 2020: e12798.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E\_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481