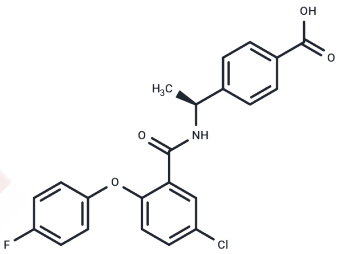
# Data Sheet (Cat.No.T14975)

TargetMol

## CJ-42794

### Chemical Properties



CAS No. : 847728-01-2

Formula: C22H17ClFNO4

Molecular Weight: 413.83

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

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|---|---|
| Description | CJ-42794 (CJ-042794) is a selective antagonist of the prostaglandin E receptor subtype 4 (EP4), inhibiting [3H]-PGE2 binding to the human EP4 receptor with a mean pKi of 8.5. It exhibits a binding affinity that is at least 200-fold more selective for the human EP4 receptor than for other human EP receptor subtypes (EP1, EP2, and EP3) (IC50: 8.5 (pKi)). |
| Targets(IC50) | Others,Prostaglandin Receptor |
| In vitro | CJ-042794 competitively inhibits PGE2-evoked elevations of intracellular cAMP levels in HEK293 cells overexpressing human EP4receptor (mean pA2: 8.6). CJ-042794 reverses the inhibitory effects of PGE2 on LPS-induced TNFα production in a concentration-dependent manner [1]. |
| In vivo | CJ-42794 significantly delays ulcer healing in rats and mice and these responses were both attenuated by coadministration of CJ-42794 [2]. |

### Solubility Information

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|---|---|
| Solubility | DMSO: 28 mg/mL (67.66 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.83 mM),Sonication is recommended.<br>*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.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 2.4165 mL | 12.0823 mL | 24.1645 mL |
| 5 mM | 0.4833 mL | 2.4165 mL | 4.8329 mL |
| 10 mM | 0.2416 mL | 1.2082 mL | 2.4165 mL |
| 50 mM | 0.0483 mL | 0.2416 mL | 0.4833 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

Murase A, et al. In vitro pharmacological characterization of CJ-042794, a novel, potent, and selective prostaglandin EP(4) receptor antagonist. Life Sci. 2008 Jan 16;82(3-4):226-232.
Hatazawa R, et al. Cyclooxygenase-2/prostaglandin E2 accelerates the healing of gastric ulcers via EP4 receptors. Am J Physiol Gastrointest Liver Physiol. 2007 Oct;293(4):G788-97.