

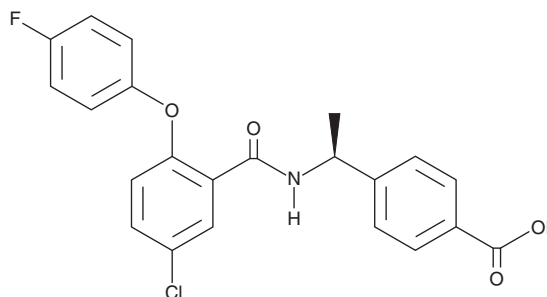
PRODUCT INFORMATION



CJ-42794

Item No. 10010428

CAS Registry No.: 847728-01-2
Formal Name: 4-[[[1S]-1-[[5-chloro-2-(4-fluorophenoxy)benzoyl]amino]ethyl]-benzoic acid
Synonym: RQ-00015986
MF: C₂₂H₁₇ClFNO₄
FW: 413.8
Purity: ≥98%
UV/Vis.: λ_{max}: 234 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

CJ-42794 is supplied as a crystalline solid. A stock solution may be made by dissolving the CJ-42794 in the solvent of choice, which should be purged with an inert gas. CJ-42794 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CJ-42794 in ethanol and DMSO is approximately 25 mg/ml and approximately 30 mg/ml in DMF.

CJ-42794 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CJ-42794 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CJ-42794 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Prostaglandin E₂ (PGE₂) activates four E prostanoid (EP) receptors, EP₁₋₄. EP₄ is a Gs protein-coupled receptor that, by elevating the second messenger cAMP, plays important roles in bone formation and resorption, cancer, and atherosclerosis.^{16772,16773,16619} CJ-42794 is a selective antagonist of EP₄ (K_i = 3.16 nM) that less potently binds EP₂ (K_i = 631 nM) and has no affinity for EP₁ or EP₃.^{4,5} It has minimal effect on numerous other receptors, enzymes, or channels.⁵ Unlike general inhibitors of PGE₂ synthesis, CJ-42794 does not cause damage to rat gastrointestinal mucosa.⁴ Instead, it delays the healing of gastric ulcers in mice and rats, suppressing the upregulation of VEGF expression and angiogenesis.⁶ CJ-42794 blocks pain and inflammation in rat models of arthritis as well as gastric tumorigenesis in mice.^{7,8}

References

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WARNING

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

SAFETY 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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