

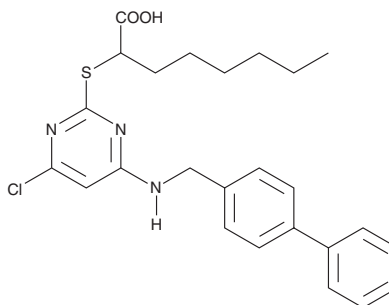
Product Information



CAY10589

Catalog No. 13164

CAS Registry No.: 1077626-52-8
Formal Name: 2-[[4-[[[1,1'-biphenyl]-4-ylmethyl]amino]-6-chloro-2-pyrimidinyl]thio]-octanoic acid
MF: C₂₅H₂₈ClN₃O₂S
FW: 470.0
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that CAY10589 be stored as supplied at -20°C. It should be stable for at least two years.

CAY10589 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10589 in an organic solvent purged with an inert gas. CAY10589 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CAY10589 in these solvents is approximately 10 mg/ml in ethanol and approximately 20 mg/ml in DMSO and DMF.

CAY10589 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10589 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CAY10589 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Microsomal prostaglandin E₂ synthase-1 (mPGES-1) with cyclooxygenase-2 (COX-2) synthesizes PGE₂, which is directly involved in signaling during inflammation, fever, and pain. 5-Lipoxygenase (5-LO) initiates the synthesis of leukotrienes (LTs), which are pro-inflammatory mediators. CAY10589 is a dual inhibitor of mPGES-1 (IC₅₀ = 1.3 μM) and 5-LO (IC₅₀ = 1.0 μM).¹ It effectively inhibits PGE₂ and LT synthesis in both cell free and intact cell assays. CAY10589 has minor effects on COX-1 and COX-2, inhibiting these enzymes 34% and 38.8%, respectively, at 10 μM.¹

Reference

1. Koeberle, A., Zettl, H., Greiner, C., *et al.* Pirinixic acid derivatives as novel dual inhibitors of microsomal prostaglandin E₂ synthase-1 and 5-lipoxygenase. *J. Med. Chem.* **51**, 8068-8076 (2008).

Related Products

ZLJ-6 - Cat. No. 13271 • Piroprost (potassium salt) - Cat. No. 18228 • (±)5-HETE lactone - Cat. No. 34215 • Caffeic Acid - Cat. No. 70602 • CAY10416 - Cat. No. 70635 • 5,6-dehydro Arachidonic Acid - Cat. No. 90020 • CAY10526 - Cat. No. 10010088

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WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent under separate cover to the MSDS supervisor at your institution.

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