

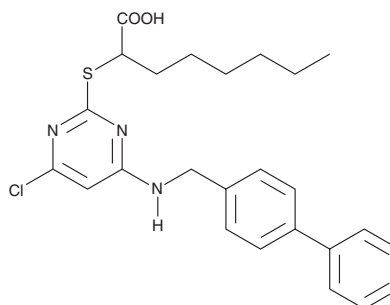
PRODUCT INFORMATION



CAY10589

Item 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%
UV/Vis.: λ_{max}: 254 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

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

Description

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(24)**, 8068-8076 (2008).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 06/20/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM