Product Information



CAY10583

Item No. 10012424

CAS Registry No.: 862891-27-8

Formal Name: 4'-[[(1-oxopentyl)phenylamino]methyl]-

[1,1'-biphenyl]-2-carboxylic acid

MF: $C_{25}H_{25}NO_3$ FW: 387.5 **Purity:** ≥98%

Stability: ≥2 years at -20°C A crystalline solid Supplied as:

HOOG

Laboratory Procedures

For long term storage, we suggest that CAY10583 be stored as supplied at -20°C. It should be stable for at least two

CAY10583 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10583 in an organic solvent purged with an inert gas. CAY10583 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CAY10583 in ethanol is approximately 0.25 mg/ml and approximately 10 mg/ml in DMSO and DMF.

CAY10583 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10583 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10583 has a solubility of approximately 0.1 mg/ml in a 1:9 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Leukotriene B₄ (LTB₄) promotes a number of leukocyte functions including aggregation, stimulation of ion fluxes, superoxide anion production, chemotaxis, and chemokinesis. Two G protein-coupled receptors, BLT, and BLT, mediate the actions of LTB₄. CAY10583 is a potent, selective full agonist for BLT₂ with an EC₅₀ value of 20 nM. It does not displace [3H]-LTB₄ binding to BLT₁ at concentrations >1 μM and activates BLT₂ at significantly lower concentrations than LTB_4 (EC₅₀ = 170 nM). CAY10583 dose dependently increases intracellular calcium stores and induces ERK phosphorylation in Chinese hamster ovary (CHO) cells expressing BLT₂ with no effect on CHO cells expressing BLT₁.

Reference

1. Iizuka, Y., Yokomizo, T., Terawaki, K., et al. Characterization of a mouse second leukotriene B₄ receptor, mBLT₂. BLT2-dependent ERK activation and cell migration of primary mouse keratinocytes. J. Biol. Chem. 280(26), 24816-24823 (2005).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10012424

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

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 Safety Data Sheet, which has been sent via email to your institution.

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