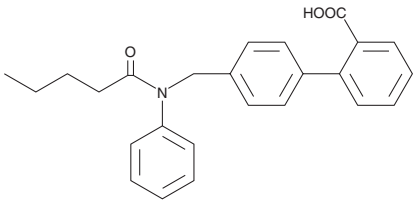
PRODUCT INFORMATION

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%
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

CAY10583 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10583 in the solvent of choice, which should be 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.

Description

Leukotriene B_4 (LTB_4) promotes a number of leukocyte functions including aggregation, stimulation of ion fluxes, superoxide anion production, chemotaxis, and chemokinesis. Two G protein-coupled receptors, BLT_1 and BLT_2 mediate the actions of LTB_4. CAY10583 is a potent, selective full agonist for BLT_2 with an EC_{50} value of 20 nM.[1] It does not displace [^{3}H]-LTB_4 binding to BLT_1 at concentrations >1 µM and activates BLT_2 at significantly lower concentrations than LTB_4 (EC_{50} = 170 nM).[1] CAY10583 dose dependently increases intracellular calcium stores and induces ERK phosphorylation in Chinese hamster ovary (CHO) cells expressing BLT_2 with no effect on CHO cells expressing BLT_1.[1]

Reference

1. Iizuka, Y., Yokomizo, T., Terawaki, K., *et al.* Characterization of a mouse second leukotriene B_4 receptor, $mBLT_2$. BLT_2-dependent ERK activation and cell migration of primary mouse keratinocytes. *J. Biol. Chem.* **280(26)**, 24816-24823 (2005).

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
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