

PRODUCT INFORMATION

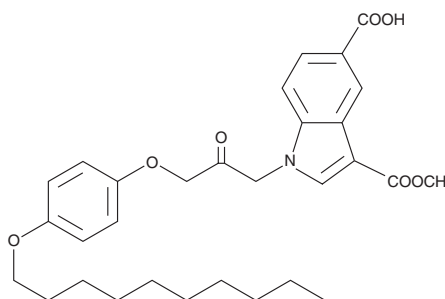


CAY10502

Item No. 10008657

CAS Registry No.: 888320-29-4
Formal Name: 1-[3-[4-(decyloxy)phenoxy]-2-oxopropyl]-1H-indole-3,5-dicarboxylic acid, 3-methyl ester

MF: C₃₀H₃₇NO₇
FW: 523.6
Purity: ≥95%
UV/Vis.: λ_{max}: 236, 289 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

CAY10502 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10502 in an organic solvent purged with an inert gas. CAY10502 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of CAY10502 in DMSO is approximately 10 mg/ml and approximately 20 mg/ml in DMF.

CAY10502 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10502 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10502 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

Phospholipase A₂ (PLA₂) catalyzes the hydrolysis of phospholipids at the *sn*-2 position leading to the production of lysophospholipids and free fatty acids. Calcium-dependent cytosolic PLA₂α (cPLA₂α) is a 85 kDa enzyme that plays a key role in the arachidonic cascade and the inflammatory response associated with this metabolic pathway.¹ CAY10502 is a potent inhibitor of cPLA₂α with an IC₅₀ value of 4.3 nM for the purified enzyme from human platelets.² It inhibits arachidonic acid mobilization from A23187-stimulated or TPA-stimulated human platelets with IC₅₀ values of 570 and 0.9 nM, respectively.²

References

- Schaloske, R.H. and Dennis, E.A. The phospholipase A₂ superfamily and its group numbering system. *Biochem. Biophys. Acta* **1761(11)**, 1246-1259 (2006).
- Ludwig, J., Bovens, S., Brauch, C., *et al.* Design and synthesis of 1-indol-1-yl-propan-2-ones as inhibitors of human cytosolic phospholipase A₂α. *J. Med. Chem.* **49(8)**, 2611-2620 (2006).

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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