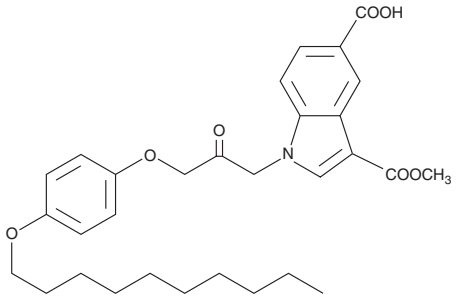
PRODUCT INFORMATION

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:	$C_{30}H_{37}NO_7$
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 A_2 (PLA_2) catalyzes the hydrolysis of phospholipids at the *sn*-2 position leading to the production of lysophospholipids and free fatty acids. Calcium-dependent cytosolic $PLA_2\alpha$ ($cPLA_2\alpha$) 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 $cPLA_2\alpha$ with an IC_{50} 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 IC_{50} values of 570 and 0.9 nM, respectively.[2]

References

1. Schaloske, R.H. and Dennis, E.A. The phospholipase A_2 superfamily and its group numbering system. *Biochem. Biophys. Acta* **1761(11)**, 1246-1259 (2006).
2. 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 $A_2\alpha$ *J. Med. Chem.* **49(8)**, 2611-2620 (2006).

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