

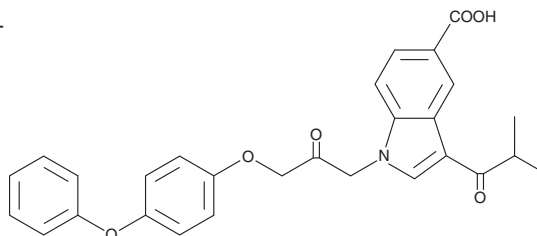
# PRODUCT INFORMATION



## CAY10650

Item No. 10743

**CAS Registry No.:** 1233706-88-1  
**Formal Name:** 3-(2-methyl-1-oxopropyl)-1-[2-oxo-3-(4-phenoxyphenoxy)propyl]-1H-indole-5-carboxylic acid  
**MF:** C<sub>28</sub>H<sub>25</sub>NO<sub>6</sub>  
**FW:** 471.5  
**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

CAY10650 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10650 in the solvent of choice, which should be purged with an inert gas. CAY10650 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CAY10650 in these solvents is approximately 20 mg/ml.

CAY10650 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10650 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CAY10650 has a solubility of approximately 0.1 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Cytosolic phospholipase A<sub>2</sub>α (cPLA<sub>2</sub>α) specifically catalyzes the hydrolysis of arachidonic acid from the *sn*-2-ester position of membrane phospholipids, playing a central role in initiating the synthesis of prostaglandins and leukotrienes, both important mediators of the inflammatory process.<sup>1</sup> CAY10650 is a highly potent (IC<sub>50</sub> = 12 nM) cPLA<sub>2</sub>α inhibitor.<sup>2</sup> It demonstrates strong anti-inflammatory effects when applied topically at a dose of 0.1 mg/ear in a mouse model of acute irritant contact dermatitis.<sup>2</sup> The phase I metabolite of this compound, CAY10641 (Item No. 10662), is also available.

### References

- Schaloske, R.H. and Dennis, E.A. The phospholipase A<sub>2</sub> superfamily and its group numbering system. *Biochim. Biophys. Acta* **1761(11)**, 1246-1259 (2006).
- Drews, A., Bovens, S., Roebrock, K., et al. 1-(5-carboxyindol-1-yl)propan-2-one inhibitors of human cytosolic phospholipase A<sub>2</sub>α with reduced lipophilicity: Synthesis, biological activity, metabolic stability, solubility, bioavailability, and topical in vivo activity. *J. Med. Chem.* **53(14)**, 5165-5178 (2010).

#### 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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