

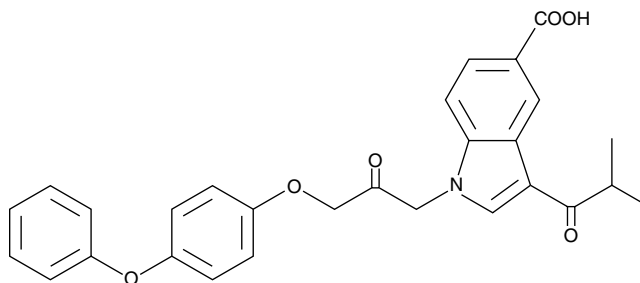
# Product Information



**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%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:** λ<sub>max</sub>: 231, 300 nm



## Laboratory Procedures

For long term storage, we suggest that CAY10650 be stored as supplied at -20°C. It should be stable for at least two years.

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

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. *Biochem. Biophys. Acta* **1761**, 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**, 5165-5178 (2010).

## Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/10743](http://www.caymanchem.com/catalog/10743)

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

### MATERIAL SAFETY DATA

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

### WARRANTY AND LIMITATION OF REMEDY

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Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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