

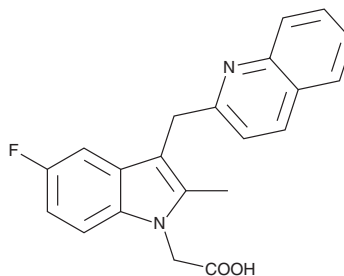
# PRODUCT INFORMATION



**OC000459**

Item No. 12027

**CAS Registry No.:** 851723-84-7  
**Formal Name:** 5-fluoro-2-methyl-3-(2-quinolinylmethyl)-1H-indole-1-acetic acid  
**MF:** C<sub>21</sub>H<sub>17</sub>FN<sub>2</sub>O<sub>2</sub>  
**FW:** 348.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 229, 281, 318 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

OC000459 is supplied as a crystalline solid. A stock solution may be made by dissolving the OC000459 in the solvent of choice, which should be purged with an inert gas. OC000459 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of OC000459 in these solvents is approximately 1.1 and 0.5 mg/ml, respectively.

OC000459 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, OC000459 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. OC000459 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

OC000459 is a potent, selective DP<sub>2</sub> antagonist that displaces [<sup>3</sup>H]prostaglandin D<sub>2</sub> ([<sup>3</sup>H]PGD<sub>2</sub>) from human recombinant DP<sub>2</sub> receptors (K<sub>i</sub> = 13 nM), rat recombinant DP<sub>2</sub> receptors (K<sub>i</sub> = 3 nM), and human native DP<sub>2</sub> (K<sub>i</sub> = 4 nM; Th2 cell membranes) without interfering with the ligand binding properties of other prostanoid receptors, including PGE<sub>1-4</sub>, DP<sub>1</sub>, TP, PGI<sub>2</sub>, and PGF.<sup>1</sup> OC000459 inhibits chemotaxis and cytokine production of human Th2 lymphocytes with IC<sub>50</sub> values of 28 and 19 nM, respectively, and competitively antagonizes eosinophil shape change responses induced by PGD<sub>2</sub> in both isolated human leukocytes (pKB = 7.9) and human whole blood (pKB = 7.5).<sup>1</sup> OC000459 was shown to inhibit blood eosinophilia in rats induced by 13,14-dihydro-15-keto PGD<sub>2</sub> (Item No. 12610) (ED<sub>50</sub> = 0.04 mg/kg) and airway eosinophilia in guinea pigs in response to an aerosol of 13,14-dihydro-15-keto PGD<sub>2</sub> (ED<sub>50</sub> = 0.01 mg/kg).<sup>1</sup>

## Reference

1. Pettipher, R., Vinall, S.L., Xue, L., et al. Pharmacologic profile of OC000459, a potent, selective, and orally active D prostanoid receptor 2 antagonist that inhibits mast cell-dependent activation of T helper 2 lymphocytes and eosinophils. *J. Pharmacol. Exp. Ther.* **340**(2), 473-482 (2012).

### 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.

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