

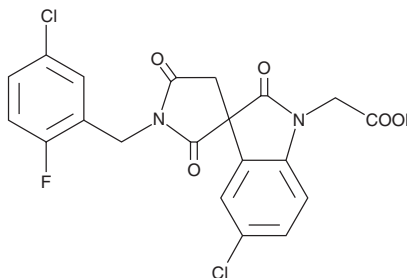
PRODUCT INFORMATION



CAY10595

Item No. 10012553

CAS Registry No.: 916047-16-0
Formal Name: 5-chloro-1'-[5-chloro-2-fluorophenyl)methyl]-2,2',5'-trioxo-spiro[3H-indole-3,3'pyrrolidine]-1(2H)-acetic acid
MF: C₂₀H₁₃Cl₂FN₂O₅
FW: 451.2
Purity: ≥97%
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

CAY10595 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10595 in the solvent of choice, which should be purged with an inert gas. CAY10595 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CAY10595 in ethanol is approximately 25 mg/ml and approximately 30 mg/ml in DMSO and DMF.

CAY10595 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10595 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CAY10595 has a solubility of approximately 0.5 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

The biological effects of prostaglandin D₂ (PGD₂) are transduced by at least two 7-transmembrane G protein-coupled receptors, designated DP₁ and CRTH2/DP₂. In humans, CRTH2/DP₂ is expressed on Th2 cells, eosinophils, and basophils where it mediates the chemotactic activity of PGD₂.¹ CAY10595, as a racemic mixture, is a potent CRTH2/DP₂ receptor antagonist that binds to the human receptor with a K_i value of 10 nM.² The R-enantiomer of CAY10595 is significantly more potent, exhibiting K_i values of 5.3 and 5 nM at the human and murine CRTH2/DP₂ receptors, respectively. The R-enantiomer of CAY10595 inhibits eosinophil chemotaxis induced by 13,14-dihydro-15-keto-PGD₂ with an IC₅₀ value of 7.3 nM.²

References

1. Hirai, H., Tanaka, K., Yoshie, O., *et al.* Prostaglandin D₂ selectivity induces chemotaxis in T helper type 2 cells, eosinophils, and basophils via seven-transmembrane receptor CRTH2. *J. Exp. Med.* **193**(2), 255-261 (2001).
2. Crosignani, S., Page, P., Missotten, M., *et al.* Discovery of a new class of potent, selective, and orally bioavailable CRTH2 (DP₂) receptor antagonists for the treatment of allergic inflammatory diseases. *J. Med. Chem.* **51**, 2227-2243 (2008).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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