

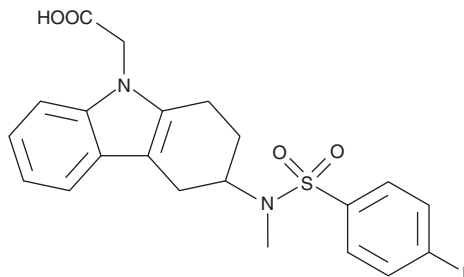
# PRODUCT INFORMATION



## CAY10471

Item No. 10006735

**CAS Registry No.:** 627865-18-3  
**Formal Name:** (+)-3-[[[4-(4-fluorophenyl)sulfonyl]methylamino]-1,2,3,4-tetrahydro-9H-carbazole-9-acetic acid  
**Synonym:** TM30089  
**MF:** C<sub>21</sub>H<sub>21</sub>FN<sub>2</sub>O<sub>4</sub>S  
**FW:** 416.5  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 227, 284 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

CAY10471 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10471 in the solvent of choice, which should be purged with an inert gas. CAY10471 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CAY10471 in ethanol is approximately 15 mg/ml and approximately 30 mg/ml in DMSO and DMF.

CAY10471 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10471 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CAY10471 has a solubility of approximately 0.5 mg/ml in a 1:5 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 PGD<sub>2</sub> are transduced by at least two 7-transmembrane G-protein coupled receptors, designated DP<sub>1</sub> and CRTH2/DP<sub>2</sub>. BAY-u3405 (Ramatroban) is an approved human medication for the treatment of allergic rhinitis that has documented activity as an antagonist of both the TP and CRTH2/DP<sub>2</sub> receptors.<sup>1,2</sup> CAY10471 is an analog of BAY-u3405 which contains modifications that increase both its potency and selectivity for the human CRTH2/DP<sub>2</sub> receptor.<sup>3</sup> CAY10471 binds to the human CRTH2/DP<sub>2</sub>, DP<sub>1</sub>, and TP receptors with K<sub>i</sub> values of 0.6, 1200, and >10,000 nM, respectively.<sup>3</sup>

### References

1. Sugimoto, H., Shichijo, M., Iino, T., *et al.* An orally bioavailable small molecule antagonist of CRTH2, Ramatroban (BAY u3405), inhibits prostaglandin D<sub>2</sub>-induced eosinophil migration *in vitro*. *J. Pharmacol. Exp. Ther.* **305**(1), 347-352 (2003).
2. McKenniff, M.G., Norman, P., Cuthbert, N.J., *et al.* BAY u3405, a potent and selective thromboxane A<sub>2</sub> receptor antagonist on airway smooth muscle *in vitro*. *Br. J. Pharmacol.* **104**(3), 585-590 (1991).
3. Ulven, T. and Kostenis, E. Minor structural modifications convert the dual TP/CRTH2 antagonist ramatroban into a highly selective and potent CRTH2 antagonist. *J. Med. Chem.* **48**(4), 897-900 (2005).

#### 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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