# **Product Information**



# **AH 6809**

Item No. 14050

CAS Registry No.: 33458-93-4

Formal Name: 6-isopropoxy-9-oxoxanthene-2-carboxylic acid

MF:  $C_{17}H_{14}O_5$ FW: 298.3 **Purity:** ≥98%

≥2 years at 4°C Stability: Supplied as: A crystalline solid  $\lambda_{max}$ : 244, 305 nm UV/Vis.:

# СООН

## **Laboratory Procedures**

For long term storage, we suggest that AH 6809 be stored as supplied at 4°C. It should be stable for at least two years. AH 6809 is supplied as a crystalline solid. A stock solution may be made by dissolving the AH 6809 in an organic solvent. AH 6809 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of AH 6809 in these solvents is approximately 0.5, 1, and 8 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of AH 6809 can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of AH 6809 in PBS (pH 7.2) is approximately 0.34 mg/ml. For greater aqueous solubility, AH 6809 can be directly dissolved in 0.1 M Na<sub>2</sub>CO<sub>3</sub> (4 mg/ml) and then diluted with PBS (pH 7.2) to achieve the desired concentration or pH. We do not recommend storing the aqueous solution for more than one day.

AH 6809 is an EP and DP receptor antagonist with nearly equal affinity for the cloned human EP1, EP2, EP3, III, and DP<sub>1</sub> receptors. AH 6809 blocks the PGE<sub>2</sub>-induced accumulation of cAMP in COS cells transfected with the human EP<sub>2</sub> receptor.<sup>2</sup> It also blocks the accumulation of Ca<sup>2+</sup> in Xenopus oocytes expressing the human EP<sub>1</sub> receptor.<sup>3</sup> In the human and guinea pig, the activity profile of AH 6809 is similar to that of SC-19220, but somewhat more potent. In the mouse, AH 6809 has the highest affinity for the EP2 receptor, but also acts as a weak antagonist at the murine EP1 and DP1 receptors. In whole human platelets, AH 6809 is an effective antagonist of the antiaggregatory actions of PGD<sub>2</sub>, but not PGI<sub>2</sub>, with an EC<sub>50</sub> value of about 5 x 10<sup>-5</sup> M.<sup>6</sup>

#### References

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- Woodward, D.F., Pepperl, D.J., Burkey, T.H., et al. 6-Isopropoxy-9-oxoxanthene-2-carboxylic acid (AH 6809), a human EP2 receptor antagonist. Biochem. Pharmacol. 50, 1731-1733 (1995).
- Funk, C.D., Furci, L., Fitzgerald, G.A., et al. Cloning and expression of a cDNA for the human prostaglandin E receptor EP<sub>1</sub> subtype. J. Biol. Chem. 268, 26767-26772 (1993).
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- Kiriyama, M., Ushikubi, F., Kobayashi, T., et al. Ligand binding specificities of the eight types and subtypes of the mouse prostanoid receptors expressed in Chinese hamster ovary cells. Br. J. Pharmacol. 122, 217-224 (1997).
- Keery, R.J. and Lumley, P. AH6809, a prostaglandin DP-receptor blocking drug on human platelets. Br. J. Pharmacol. 94, 745-754 (1988).

#### Related Products

For a list of related products please visit: www.caymanchem.com/catalog/14050

WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

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.

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