

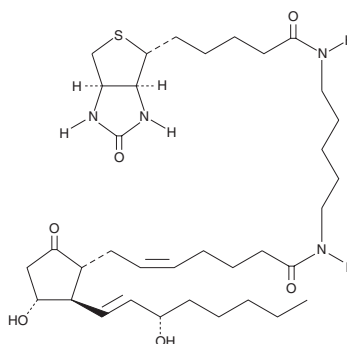
Product Information



Prostaglandin E₂-biotin

Catalog No. 10006987

Formal Name: 11 α ,15S-dihydroxy-9-oxo-prosta-5Z,13E-dien-1-oyl-N'-biotinoyl-1,5-diaminopentane
Synonym: PGE₂-biotin
MF: C₃₅H₅₈N₄O₆S
FW: 662.9
Purity: \geq 95%
Stability: \geq 1 year at -20°C
Supplied as: A solution in ethanol



Laboratory Procedures

For long term storage, we suggest that prostaglandin E₂-biotin (PGE₂-biotin) be stored as supplied at -20°C. It should be stable for at least one year.

PGE₂-biotin is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of PGE₂-biotin in these solvents is at least 10 mg/ml.

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. If an organic solvent-free solution of PGE₂-biotin is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of PGE₂-biotin in PBS (pH 7.2) is at least 0.1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

PGE₂ is the major eicosanoid product of cyclooxygenase-1 and 2 in epithelial cells, leukocytes, reproductive tissues, and many others. PGE₂ contracts smooth muscle, protects the gastric mucosa, modulates immune function, and regulates fertility and implantation. PGE₂ acts through at least four 7-transmembrane G-protein coupled receptors, EP₁-EP₄. PGE₂-biotin is an affinity probe which allows PGE₂ to be detected through an interaction with the biotin ligand. PGE₂-biotin was designed to allow PGE₂ to be detected in complexes with transmembrane receptors and/or nucleic acid or protein binding partners. It is thus a tool to be used in the general elucidation of the mechanism of action of PGs.

Related Products

Prostaglandin E₂ - Cat. No. 14010 • Prostaglandin D₂-biotin - Cat. No. 10006697 • Prostaglandin F_{2 α} -biotin - Cat. No. 10006988

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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

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery.**

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

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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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