

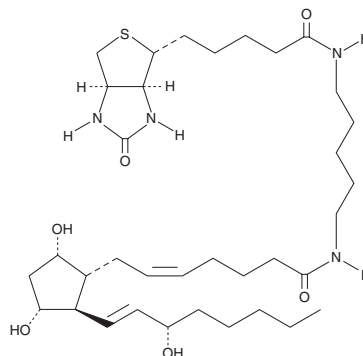
PRODUCT INFORMATION



Prostaglandin F_{2α}-biotin

Item No. 10006988

Formal Name: 9α,11α,15S-trihydroxy-prosta-5Z,13E-dien-1-oyl-N'-biotinoyl-1,5-diaminopentane
Synonym: PGF_{2α}-biotin
MF: C₃₅H₆₀N₄O₆S
FW: 664.9
Purity: ≥96%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Prostaglandin F_{2α}-biotin (PGF_{2α}-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 PGF_{2α}-biotin in these solvents is approximately 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 PGF_{2α}-biotin is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of PGF_{2α}-biotin in PBS (pH 7.2) is approximately 0.1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PGF_{2α} is the major eicosanoid product of cyclooxygenase-1 and 2 in reproductive tissues, and many others. PGF_{2α} contracts bronchial smooth muscle, and regulates fertility and implantation. PGF_{2α} acts through the FP receptor, a 7-transmembrane G-protein coupled receptor. PGF_{2α}-biotin is an affinity probe which allows PGF_{2α} to be detected through an interaction with the biotin ligand. PGF_{2α}-biotin was designed to allow PGF_{2α} 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.

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.

Copyright Cayman Chemical Company, 05/14/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM