

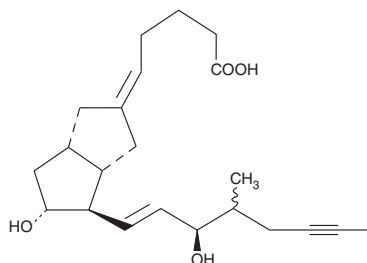
PRODUCT INFORMATION



15(R)-Iloprost

Item No. 10043

CAS Registry No.: 85026-51-3
Formal Name: 6,9 α -methylene-11 α ,15R-dihydroxy-16-methyl-prosta-5E,13E-dien-18-yn-1-oic acid
MF: C₂₂H₃₂O₄
FW: 360.5
Purity: \geq 97%
Stability: \geq 1 year at -20°C
Supplied as: A solution in methyl acetate



Laboratory Procedures

For long term storage, we suggest that 15(R)-iloprost be stored as supplied at -20°C. It should be stable for at least one year.

15(R)-Iloprost is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 15(R)-iloprost in these solvents is approximately 25 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 15(R)-iloprost is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 15(R)-iloprost in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Iloprost is a second generation structural analog of prostacyclin (PGI₂) with about ten-fold greater potency than the first generation stable analogs, typified by carbaprostacyclin.¹ Iloprost binds with equal affinity to the human recombinant IP and EPs receptors, with a K_i of 11 nM.² 15(R)-Iloprost is the 'unnatural' or inverted C-15 epimer of iloprost. This transformation frequently attenuates the biological agonist activity of prostaglandin analogs by several orders of magnitude. There are no literature reports of the biological activity of 15(R)-iloprost.

References

1. Schrör, K., Darius, H., Matzky, R., *et al.* The antiplatelet and cardiovascular actions of a new carbacyclin derivative (ZK36374) - equipotent to PGI₂ *in vitro*. *Naunyn-Schmiedeberg's Arch. Pharmacol.* **316**, 252-255 (1981).
2. Abramovitz, M., Adam, M., Boie, Y., *et al.* The utilization of recombinant prostanoid receptors to determine the affinities and selectivities of prostaglandins and related analogs. *Biochim. Biophys. Acta* **1483**, 285-293 (2000).

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.

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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