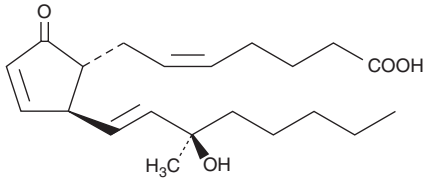
PRODUCT INFORMATION

15(R)-15-methyl Prostaglandin A_2

Item No. 10270

CAS Registry No.: 96440-68-5
Formal Name: 9-oxo-15R-hydroxy-15-methyl-prosta-5Z,10,13E-trien-1-oic acid
Synonym: 15(R)-15-methyl PGA_2
MF: $C_{21}H_{32}O_4$
FW: 348.5
Purity: ≥98%
UV/Vis.: λ_{max}: 216 nm
Supplied as: A 10 mg/ml solution in methyl acetate
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

15(R)-15-methyl PGA_2 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)-15-methyl PGA_2 in these solvents is approximately 100, 50, and 75 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. If an organic solvent-free aqueous solution of 15(R)-15-methyl PGA_2 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)-15-methyl PGA_2 in PBS (pH 7.2) is approximately 2.4 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Arbaprostil (15(R)-15-methyl PGE_2) is a synthetic PGE_2 analog developed for its cytoprotective activity.[1] 15(R)-15-methyl PGA_2 is one of several impurities which are possible in the production of commercial lots of bulk Arbaprostil.[2] The pharmacology and EP receptor binding affinity for 15(R)-15-methyl PGA_2 has not been published.

References

1. Collins, P.W. Misoprostol: Discovery, development, and clinical applications. *Medicinal Research Reviews* **10,** 149-172 (1990).
2. Kissinger, L.D. and Robins, R.H. Silver-modified mobile phase for normal-phase liquid chromatographic determination of prostaglandins and their 5,6-*trans* isomers in prostaglandin bulk drugs and triacetin solutions. *J. Chromatogr.* **321,** 353-362 (1985).

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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