PRODUCT INFORMATION



15(R)-15-methyl Prostaglandin A₂

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 PGA₂

MF: $C_{21}H_{32}O_4$ 348.5 FW: **Purity:** ≥98%

UV/Vis.: λ_{max} : 216 nm

Supplied as: A solution in methyl acetate

Storage: -20°C Stability: ≥2 years

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

Laboratory Procedures

15(R)-15-methyl PGA₂ 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 PGA₂ 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 PGA2 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 PGA2 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 PGE2) is a synthetic PGE2 analog developed for its cytoprotective activity. 15(R)-15-methyl PGA2 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 PGA₂ 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.

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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