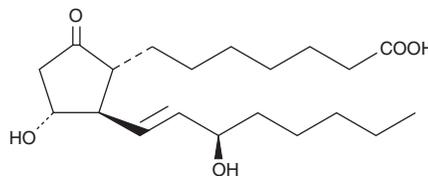


PRODUCT INFORMATION



15(R)-Prostaglandin E₁ Item No. 13710

CAS Registry No.: 20897-91-0
Formal Name: 9-oxo-11 α ,15R-dihydroxy-
prost-13E-en-1-oic acid
Synonyms: 15(R)-PGE₁, 15-*epi* PGE₁
MF: C₂₀H₃₄O₅
FW: 354.5
Purity: \geq 95%
Supplied as: A solution in methyl acetate
Storage: -20°C
Stability: \geq 2 years



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

Laboratory Procedures

15(R)-Prostaglandin E₁ (15(R)-PGE₁) is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the 15(R)-PGE₁ under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of 15(R)-PGE₁ in DMF is approximately 100 mg/ml and approximately 50 mg/ml in ethanol and DMSO.

15(R)-PGE₁ is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the 15(R)-PGE₁ solution of methyl acetate should be diluted with the aqueous buffer of choice. The solubility of 15(R)-PGE₁ in PBS (pH 7.2) is approximately 1.6 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

15(R)-PGE₁ is the "unnatural" C-15 stereoisomer of PGE₁. It is essentially inactive biologically when compared to PGE₁.¹ It is a non-competitive inhibitor of 15-hydroxy PGDH with an IC₅₀ of 189 μ M.²

References

1. Nakano, J. Relationship between the chemical structure of prostaglandins and their vasoactivities in dogs. *Br. J. Pharmacol.* **44**, 63-70 (1972).
2. Jarabak, J. and Braithwaite, S.S. Kinetic studies on a 15-hydroxyprostaglandin dehydrogenase from human placenta. The reaction mechanism and the mechanism of action of various inhibitors. *Arch. Biochem. Biophys.* **177**, 245-254 (1976).

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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