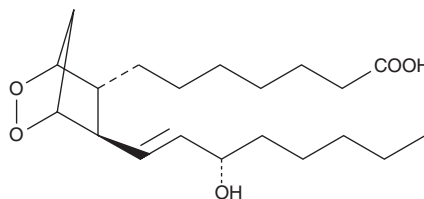


PRODUCT INFORMATION



Prostaglandin H₁ Item No. 17015

CAS Registry No.: 52589-22-7
Formal Name: 9 α ,11 α -epidioxy-15S-hydroxy-prost-13E-en-1-oic acid
Synonyms: PGH₁, PGR₁, Prostaglandin R₁
MF: C₂₀H₃₄O₅
FW: 354.5
Purity: \geq 95%
Supplied as: A solution in acetone
Storage: -80°C
Stability: \geq 2 years



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

Laboratory Procedures

Prostaglandin H₁ (PGH₁) is supplied as a solution in acetone. To change the solvent, simply evaporate the acetone under a gentle stream of nitrogen and immediately add the solvent of choice. The solvent ethanol purged with an inert gas can be used. The solubility of PGH₁ in ethanol is approximately 100 mg/ml.

PGH₁ is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the acetonic solution of PGH₁ should be diluted with the aqueous buffer of choice. The solubility of PGH₁ in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PGH₁ is the unstable precursor to all 1-series PGs and thromboxanes.¹⁻³ It is produced from dihomog- γ -linolenic acid (DGLA; Item No. 90230) by COX-1 and COX-2.^{2,4} PGH₁ is an agonist of the PGD₂ receptor CRTH₂.⁵ It increases intracellular calcium levels in HEK293 cells expressing CRTH₂ when used at a concentration of 3 μ M and induces CRTH₂ internalization at 1 μ M, an effect that can be blocked by the CRTH₂ antagonist TM30089 (CAY10471; Item No. 10006735). PGH₁ is also a suicide inhibitor of platelet thromboxane synthase (K_i = 28 μ M).⁶

References

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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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