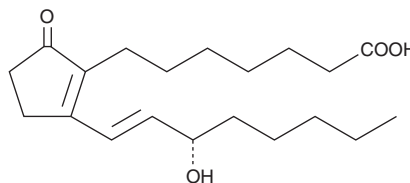


PRODUCT INFORMATION



Prostaglandin B₁ Item No. 11110

CAS Registry No.: 13345-51-2
Formal Name: 9-oxo-15S-hydroxy-prosta-8(12),13E-dien-1-oic acid
Synonym: PGB₁
MF: C₂₀H₃₂O₄
FW: 336.5
Purity: ≥98%
UV/Vis.: λ_{max}: 278 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Prostaglandin B₁ (PGB₁) is supplied as a crystalline solid. A stock solution may be made by dissolving the PGB₁ in the solvent of choice, which should be purged with an inert gas. PGB₁ is soluble in organic solvents such as ethanol, DMSO, or dimethyl formamide. The solubility of PGB₁ 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 any biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of PGB₁ can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of PGB₁ in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PGB₁ is a non-enzymatic dehydration product of PGE₁ resulting from treatment with strong base. Oligomers of PGB₁ are known to exhibit calcium ionophoric activity.¹⁻³

References

1. Uribe, S., Ohnishi, S.T., Israelite, C., *et al.* Calcium ionophoretic activity of chemically synthesized oligomeric derivatives of prostaglandin B₁. *Biochim. Biophys. Acta* **924(1)**, 87-98 (1987).
2. Ohnishi, S.T. and Devlin, T.M. Calcium ionophore activity of a prostaglandin B₁ derivative (PGB_x). *Biochem. Biophys. Res. Commun.* **89(1)**, 240-245 (1979).
3. Hamberg, M. Metabolism of prostaglandin in rat liver mitochondria. *Eur. J. Biochem.* **6(1)**, 135-146 (1968).

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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