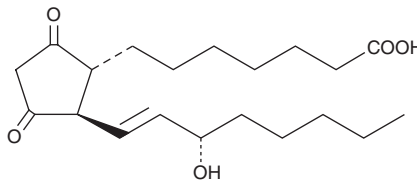


PRODUCT INFORMATION



Prostaglandin K₁ Item No. 18800

CAS Registry No.: 69413-73-6
Formal Name: 9,11-dioxo-15S-hydroxy-prost-13E-en-1-oic acid
Synonym: PGK₁
MF: C₂₀H₃₂O₅
FW: 352.5
Purity: ≥95%
UV/Vis.: λ_{max}: 245 nm
Supplied as: A solution in methyl acetate
Storage: -20°C
Stability: ≥1 year



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

Laboratory Procedures

Prostaglandin K₁ (PGK₁) 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 PGK₁ in these solvents is approximately 75, 50, and 100 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 solution of PGK₁ is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of PGK₁ in PBS (pH 7.2) is approximately 2.7 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PGK₁ is a 9,11-diketo analog of PGE₁ (Item No. 13010) or PGD₁ (Item No. 12000). It is a PGE₂ receptor subtype EP₁ agonist that has 387-fold reduced potency compared to PGE₂ (Item No. 14010).¹

Reference

1. Ungrin, M.D., Carrière, M.C., Denis, D., *et al.* Key structural features of prostaglandin E₂ and prostanoid analogs involved in binding and activation of the human EP₁ prostanoid receptor. *Mol. Pharmacol.* **59**(6), 1446-1456 (2001).

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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