

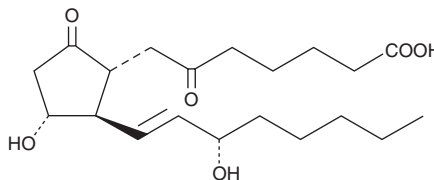
PRODUCT INFORMATION



6-keto Prostaglandin E₁

Item No. 13260

CAS Registry No.: 67786-53-2
Formal Name: 6,9-dioxo-11 α ,15S-dihydroxy-prost-13E-en-1-oic acid
Synonym: 6-keto PGE₁
MF: C₂₀H₃₂O₆
FW: 368.5
Purity: \geq 98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: \geq 2 years
Melting Point: 65°C



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

Laboratory Procedures

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

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 PGE₁ is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of PGE₁ in PBS, pH 7.2, is approximately 3.3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

6-keto PGE₁ is a metabolite isolated after the incubation of PGI₂ with rabbit liver microsomes.¹ However, it is not produced in appreciable amounts following IV infusion of PGI₂ in humans.² 6-keto PGE₁ is equipotent with PGI₂ as a vasodilator; in most other aspects its activity resembles PGE₁.³

References

1. Wong, P.Y.-K., Malik, K.U., Desiderio, D.M., *et al.* Hepatic metabolism of prostacyclin (PGI₂) in the rabbit: Formation of a potent novel inhibitor of platelet aggregation. *Biochem. Biophys. Res. Commun.* **93**, 486-494 (1980).
2. Jackson, E.K., Goodman, R.P., Fitzgerald, G.A., *et al.* Assessment of the extent to which exogenous prostaglandin I₂ is converted to 6-keto-prostaglandin E₁ in human subjects. *J. Pharmacol. Exp. Ther.* **221**, 183-187 (1982).
3. Adaikan, P.G., Tai, M.Y., Lau, L.C., *et al.* A comparison of some pharmacological actions of prostaglandin D₂, 6-oxo-PGE₁ and PGI₂. *Prostaglandins* **27**, 505-516 (1984).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/05/2019

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM