

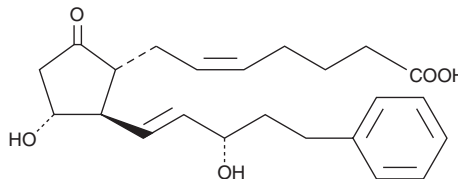
Product Information



17-phenyl trinor Prostaglandin E₂

Catalog No. 14810

CAS Registry No: 38315-43-4
Formal Name: 9-oxo-11 α ,15S-dihydroxy-17-phenyl-18,19,20-trinor-prosta-5Z,13E-dien-1-oic acid
MF: C₂₃H₃₀O₅
FW: 386.5
Purity: \geq 98%
Stability: \geq 2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

17-phenyl trinor Prostaglandin E₂ (17-phenyl trinor PGE₂) is a synthetic analog of PGE₂. For long term storage, we suggest that 17-phenyl trinor PGE₂ be stored as supplied at -20°C. It will be stable for at least two years.

17-phenyl trinor PGE₂ is supplied as a crystalline solid. Stock solutions of 17-phenyl trinor PGE₂ can be made by dissolving the crystalline compound in the solvent of choice. Solvents such as ethanol, DMSO, or dimethyl formamide purged with an inert gas can be used. The solubility of 17-phenyl trinor PGE₂ in these solvents is approximately 100 mg/ml. 17-phenyl trinor PGE₂ is stable for at least six months in these solvents if stored at -20°C.

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 aqueous solution of 17-phenyl trinor PGE₂ is needed, it can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of 17-phenyl trinor PGE₂ in PBS (pH 7.2) is approximately 0.8 mg/ml. Store aqueous solutions of 17-phenyl trinor PGE₂ on ice and use within 12 hours of preparation. Although the aqueous solutions of 17-phenyl trinor PGE₂ may be stable for more than 12 hours, we strongly recommend using a fresh preparation each day.

17-phenyl trinor PGE₂ is an EP₁ and EP₃ receptor agonist.^{1,2} It causes contraction of the guinea pig ileum at a concentration of 11 μ M.¹ 17-phenyl trinor PGE₂ is slightly less potent than PGE₂ in stimulating gerbil colon and rat uterus.² With an ED₅₀ value of 350 μ g/kg, 17-phenyl trinor PGE₂ is 4.4 times more potent than PGE₂ as an antifertility agent in hamsters.²

References

1. Lawrence, R.A., Jones, R.L., Wilson, N.H. Characterization of receptors involved in the direct and indirect actions of prostaglandins E and I on the guinea-pig ileum. *Br. J. Pharmacol.* **105**, 271-278 (1992).
2. Miller, W.L., Weeks, J.R., Lauderdale, J.W., *et al.* Biological activities of 17-phenyl-18,19,20-trinor-prostaglandins. *Prostaglandins* **9**, 9-18 (1975).

Related Product

Prostaglandin E₂ - Cat. No. 14010

WARNING: THIS PRODUCT IS NOT INTENDED OR APPROVED FOR HUMAN OR VETERINARY USE. USE OF THIS PRODUCT FOR HUMAN OR ANIMAL TESTING IS EXTREMELY HAZARDOUS AND MAY RESULT IN DISEASE, SEVERE INJURY, OR DEATH.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent under separate cover to the MSDS supervisor at your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees. Buyer's exclusive remedy and Cayman's sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman's option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.

Copyright Cayman Chemical Company, 12/13/2007

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com