Product Information



11-deoxy Prostaglandin E₂

Catalog No. 14520

CAS Registry No: 35536-53-9

Formal Name: 9-oxo-15S-hydroxy-prosta-5Z,13E-

dien-1-oic acid

MF: $C_{20}H_{32}O_4$ FW: 336.5 **Purity:**

Stability: ≥2 years at -20°C Supplied as: A crystalline solid

COOH ÓН

Laboratory Procedures

For long term storage, we suggest that 11-deoxy Prostaglandin E2 (11-deoxy PGE2) be stored as supplied at -20°C. It will be stable for at least two years.

11-deoxy PGE2 is supplied as a crystalline solid. A stock solution may be made by dissolving the 11-deoxy PGE2 in an organic solvent purged with an inert gas. 11-deoxy PGE, is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 11-deoxy PGE, in these solvents is approximately 100 mg/ml. 11-deoxy PGE, will be 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. Organic solvent-free aqueous solutions of 11-deoxy PGE, can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of 11-deoxy PGE2 in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

11-deoxy PGE₂ is a stable, synthetic analog of PGE₂. In contrast to PGE₂ which has bronchodilation effects, 11-deoxy PGE2 is a powerful bronchoconstrictor and contracts human respiratory tract smooth muscle with potencies ranging from 5 to 30 times higher than PGF₂₀.1

Reference

1. Karim, S.M.M., Adaikan, P.G., and Kottegoda, S.R. Prostaglandins and human respiratory tract smooth muscle: Structure activity relationship. Adv. Prostaglandin Thromboxane Res. 7, 969-980 (1980).

Related Products

11-deoxy Prostaglandin E_1 - Cat. No. 13510 • Prostaglandin E_2 - Cat. No. 14010 • Prostaglandin $F_{2\alpha}$ - Cat. No. 16010

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.

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 ose, 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

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

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

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 rty (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, 03/30/2006

Cayman Chemical

Mailing address

1180 E. Ellsworth Road Ann Arbor, MI 48108 USA

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

(734) 971-3640

custserv@caymanchem.com

www.caymanchem.com