Product Information



15(S)-15-methyl Prostaglandin D,

Catalog No. 12730

CAS Registry No.: 85280-90-6

Formal Name: 9α,15S-dihydroxy-11-oxo-15-methyl-prosta-

5Z,13E-dien-1-oic acid

MF: $C_{21}H_{34}O_{5}$ FW: 366.5 **Purity:** ≥95%

≥1 year at -20°C Stability:

Supplied as: A solution in methyl acetate

СООН HÓ CH₃

Laboratory Procedures

15(S)-15-methyl Prostaglandin D₂ (15(S)-15-methyl PGD₂) is a metabolically stable synthetic analog of PGD₂. For long term storage, we suggest that 15(S)-15-methyl PGD, be stored as supplied at -20°C. It will be stable for at least one year.

15(S)-15-methyl PGD₂ 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 15(S)-15-methyl PGD₂ in these solvents is approximately 50 mg/ml. 15(S)-15-methyl PGD₂ 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 solution of 15(S)-15-methyl PGD₂ is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 15(S)-15-methyl PGD₂ in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

In contrast to PGD₂, 15(S)-15-methyl PGD₂ induces vasoconstriction and increases systemic blood pressure with much reduced inhibitory activity on ADP-induced platelet aggregation. It also exhibits strong antifertility activity in hamsters (200-fold more potent than PGD₂).¹

Reference

1. Bundy, G.L., Morton, D.R., Peterson, D.C., et al. Synthesis and platelet aggregation inhibiting activity of prostaglandin D analogues. J. Med. Chem. 26, 790-799 (1983).

Related Products

Prostaglandin D₂ - Cat. No. 12010 • 15(R)-15-methyl Prostaglandin D₂ - Cat. No. 12720

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 u Data Sheet, which has been sent under separate cover to the MSD supervisor at your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes no warranty of any kind, expressed or implied, including, but not limited to, the warranties of fitness for a particular purpose and merchantability, which extends beyond the description of the chemicals on the face hereof, except that the material will meet our specifications at the time of delivery. Buyer's exclusive remedy and Cayman Chemical Company's sole liability hereunder shall be limited to refund of the purchase price of, or at Cayman Chemical Company's option the replacement of, all material that does not meet our specifications. Cayman Chemical Company shall not be liable otherwise or for incidental or consequential damages, including, but not limited to, the costs of handling. Said refund or replacement is conditioned on Buyer giving written notice to Cayman Chemical Company within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within said thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

Copyright Cayman Chemical Company, 03/27/2006

Cayman Chemical

Mailing address

1180 E. Ellsworth Road Ann Arbor, MI 48108 USA

Phone

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

(734) 971-3640

custserv@caymanchem.com

www.caymanchem.com