



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

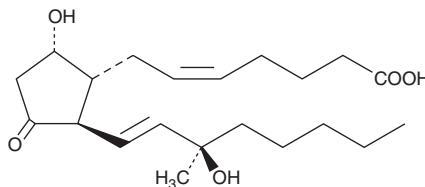
[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

PRODUCT INFORMATION



15(R)-15-methyl Prostaglandin D₂ Item No. 12720

CAS Registry No.: 210978-26-0
Formal Name: 9 α ,15R-dihydroxy-11-oxo-15-methyl-prosta-5Z,13E-dien-1-oic acid
Synonym: 15(R)-15-methyl PGD₂
MF: C₂₁H₃₄O₅
FW: 366.5
Purity: \geq 95%
Stability: \geq 1 year at -20°C
Supplied as: A solution in methyl acetate



Laboratory Procedures

For long term storage, we suggest that 15(R)-15-methyl prostaglandin D₂ (15(R)-15-methyl PGD₂) be stored as supplied at -20°C. It should be stable for one year.

15(R)-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(R)-15-methyl PGD₂ 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 15(R)-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(R)-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.

Description

15(R)-15-methyl PGD₂ is a metabolically stable synthetic analog of PGD₂ (Item No. 12010). The physiological actions of PGD₂ include regulation of sleep, lowering of body temperature, inhibition of platelet aggregation, and relaxation of vascular smooth muscle.¹⁻³ PGD₂ mediates its effects by 2 distinct G-protein-coupled receptors, DP₁ and CRTH2/DP₂.⁴⁻⁶ 15(R)-15-methyl PGD₂ is a potent, selective agonist for the CRTH2/DP₂ receptor.⁷ The EC₅₀ values for eosinophil CD11b expression, actin polymerization, and chemotaxis are 1.4, 3.8, and 1.7 nM, respectively, each of which is approximately 3-5 fold lower than those for PGD₂. In contrast the EC₅₀ for the DP₁-mediated increase in platelet cAMP by 15(R)-15-methyl PGD₂ is >10 μ M.⁷

References

1. Hayaishi, O. *J. Biol. Chem.* **263**, 14593-14596 (1988).
2. Onoe, H., Ueno, R., Fujita, I., et al. *Proc. Natl. Acad. Sci. USA* **85**, 4082-4086 (1988).
3. Giles, H. and Leff, P. *Prostaglandins* **35**, 277-300 (1988).
4. Boie, Y., Sawyer, N., Slipetz, D.M., et al. *J. Biol. Chem.* **270**, 18910-18916 (1995).
5. Monneret, G., Gravel, S., Diamond, M., et al. *Blood* **98(6)**, 1942-1948 (2001).
6. Hirai, H., Tanaka, K., Yoshie, O., et al. *J. Exp. Med.* **193(2)**, 255-261 (2001).
7. Monneret, G., Cossette, C., Gravel, S., et al. *J. Pharmacol. Exp. Ther.* **304(1)**, 349-355 (2003).

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, 08/11/2015

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