



# 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](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

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

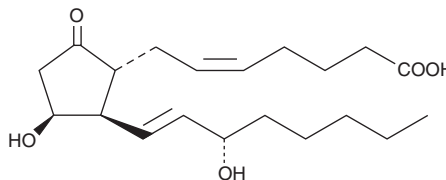
# PRODUCT INFORMATION



## 11 $\beta$ -Prostaglandin E<sub>2</sub>

Item No. 14510

**CAS Registry No.:** 38310-90-6  
**Formal Name:** 9-oxo-11 $\beta$ ,15S-dihydroxy-prosta-5Z,13E-dien-1-oic acid  
**Synonyms:** 11 $\beta$ -PGE<sub>2</sub>, 11-*epi* PGE<sub>2</sub>  
**MF:** C<sub>20</sub>H<sub>32</sub>O<sub>5</sub>  
**FW:** 352.5  
**Purity:**  $\geq$ 98%  
**Supplied as:** A solution in methyl acetate  
**Storage:** -20°C  
**Stability:**  $\geq$ 1 year



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

### Laboratory Procedures

11 $\beta$ -Prostaglandin E<sub>2</sub> (11 $\beta$ -PGE<sub>2</sub>) 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 11 $\beta$ -PGE<sub>2</sub> in these solvents is approximately 100 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 11 $\beta$ -PGE<sub>2</sub> is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 11 $\beta$ -PGE<sub>2</sub> in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

11 $\beta$ -PGE<sub>2</sub> is the C-11 epimer of PGE<sub>2</sub>. It is a moderate inhibitor of PGE<sub>2</sub> binding to rat hypothalamic membranes with a K<sub>i</sub> value of 53 nM.<sup>1</sup> 11 $\beta$ -PGE<sub>2</sub> also stimulates bone resorption in rats at concentrations of 10 to 1,000 nM which is similar to PGE<sub>2</sub>.<sup>2</sup> 11 $\beta$ -PGE<sub>2</sub> inhibits PGE<sub>2</sub> binding to the prostaglandin transporter protein with a K<sub>i</sub> of 56 nM.<sup>3</sup>

### References

1. Dray, F. and Heaulme, M. Prostaglandins of the E series inhibit release of noradrenaline in rat hypothalamus by a mechanism unrelated to classical  $\alpha_2$  adrenergic presynaptic inhibition. *Neuropharmacology* **23(4)**, 457-462 (1984).
2. Raisz, L.G. and Woodiel, F.N. Effect of alterations in the cyclopentane ring on bone resorptive activity of prostaglandin. *Prostaglandins* **37(2)**, 229-235 (1989).
3. Itoh, S., Lu, R., Bao, Y., et al. Structural determinants of substrates for the prostaglandin transporter PGT. *Mol. Pharmacol.* **50(4)**, 736-742 (1996).

#### 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, 09/16/2021

#### 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