

# 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 in



# **Product Information**

# Prostaglandin B.

Item No. 11510

**CAS Registry No.:** 39306-29-1  $(PGB)_{n} n=3-5$ FW: 1,000-1,500 **Purity:** Mixture of oligomers Stability: ≥1 year at -20°C Supplied as: A solution in ethanol

UV/Vis.:  $\lambda_{\text{max}}$ : 236 nm

## **Laboratory Procedures**

For long term storage, we suggest that Prostaglandin B, (PGB,) be stored as supplied at -20°C. It should be stable for at least one year.

PGB<sub>v</sub> is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO or dimethyl formamide purged with an inert gas can be used. The solubility of PGB<sub>v</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. Organic solvent-free solutions of PGB, can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of PGB, in PBS (pH 7.2) is approximately 3.8 mg/ml. We do not recommend storing the aqueous solution for more than one day.

PGB<sub>x</sub> is a mixture of oligomers of PGB<sub>1</sub> with a molecular weight of 1,000-1,500. PGB<sub>x</sub> has antioxidant and free radical trapping activity that was first studied in isolated mitochondria. It has anti-inflammatory and cytoprotective activity which may be attributed to inhibition of the 14 kDa sPLA2. 2,3 At a dose of 1 mg/kg, PGBx significantly reduces the incidence of ulcers in rats.2

### References

- 1. Polis, B.D., Polis, E., and Kwong, S. Protection and reactivation of oxidative phosphorylation in mitochondria by a stable free-radical prostaglandin polymer (PGB<sub>v</sub>). *Proc. Natl. Acad. Sci. USA* **76**, 1598-1602 (1979).
- Kumashiro, R., Devlin, T.M., Kholoussy, A.M., et al. Prostaglandin B, in the prevention of stress ulcers in rats. Int. Surg. 70, 247-250 (1985).
- 3. Franson, R.C., Rosenthal, M.D., and Regelson, W. Mechanism(s) of cytoprotective and anti-inflammatory activity of PGB<sub>1</sub> oligomers: PGB<sub>2</sub> has potent anti-phospholipase A<sub>2</sub> and anti-oxidant activity. Prostaglandins Leukot. Essent. Fatty Acids 43, 63-70 (1991).

## Additional Reading

Ohnishi, S.T., Barr, J.K., Katagi, C., et al. Protection of rat spinal cord against contusion injury by new prostaglandin derivatives. Arzneimittelforschung 39, 236-239 (1989).

### **Related Products**

For a list of related products please visit: www.caymanchem.com/catalog/11510

WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

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 via email to 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 <u>meet our specifications</u>

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, inclidental 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, 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 sail 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, 06/20/2012

## 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