

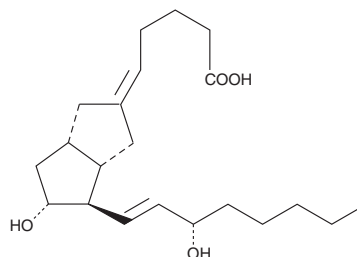
# Product Information



## Carbaprostacyclin

Item No. 18210

**CAS Registry No.:** 69552-46-1  
**Formal Name:** 6,9 $\alpha$ -methylene-11 $\alpha$ ,15S-dihydroxy-prosta-5E,13E-dien-1-oic acid  
**Synonyms:** Carbacyclin; cPGI  
**MF:** C<sub>21</sub>H<sub>34</sub>O<sub>4</sub>  
**FW:** 350.5  
**Purity:**  $\geq$ 99%  
**Stability:**  $\geq$ 1 year at -20°C  
**Supplied as:** A crystalline solid



### Laboratory Procedures

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

Carbaprostacyclin is supplied as a crystalline solid. A stock solution can be made by dissolving the carbaprostacyclin in an organic solvent. Carbaprostacyclin is soluble in solvents such as DMSO, ethanol, and dimethyl formamide. The solubility of carbaprostacyclin in these solvents is approximately 5 mg/ml.

Further dilutions of the stock solution should be made prior to performing any 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 carbaprostacyclin is needed, it can be prepared by directly dissolving the crystalline solid in aqueous solutions. The solubility of carbaprostacyclin in PBS (pH 7.2) is approximately 0.8 mg/ml. Neutral (pH 7.4) aqueous solutions of carbaprostacyclin are stable for 30 days when stored at room temperature.<sup>1</sup>

Carbaprostacyclin is a stable analog of prostacyclin (PGI<sub>2</sub>). Carbaprostacyclin inhibits platelet aggregation with 10% of the activity exhibited by PGI<sub>2</sub>.<sup>1,2</sup> The ED<sub>50</sub> value of carbaprostacyclin for the *in vitro* inhibition of ADP-induced platelet aggregation in human platelet-rich plasma is 16.7 ng/ml.<sup>3</sup>

### References

1. Whittle, B.J.R., Moncada, S., Whiting, F., *et al.* Carbacyclin - a potent stable prostacyclin analogue for the inhibition of platelet aggregation. *Prostaglandins* **19**, 605-627 (1980).
2. Aiken, J.W. and Shebuski, R.J. Comparison in anesthetized dogs of the anti-aggregatory and hemodynamic effects of prostacyclin and a chemically stable prostacyclin analog, 6 $\alpha$ -carba-PGI<sub>2</sub> (carbacyclin). *Prostaglandins* **19**, 629-643 (1980).
3. Adaikan, P.G., Karim, S.M.M., and Lau, L.C. Platelet and other effects of carboprostacyclin - a stable prostacyclin analogue. *Prostaglandins and Medicine* **5**, 307-320 (1980).

### Related Products

16(R)-AFP 07 (free acid) - Item No. 10991 • 5-*cis* Carbaprostacyclin - Item No. 18211 • Prostacyclin (sodium salt) - Item No. 18220 • Carbaprostacyclin methyl ester - Item No. 9000183

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### 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 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 meet our specifications 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, 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 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 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, 09/13/2010

### Cayman Chemical

#### Mailing address

1180 E. Ellsworth Road  
Ann Arbor, MI  
48108 USA

#### Phone

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

#### Fax

(734) 971-3640

#### E-Mail

custserv@caymanchem.com

#### Web

www.caymanchem.com