

## 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 <u>mail@szabo-scandic.com</u> www.szabo-scandic.com

# **Product Information**



COOH

## Prostaglandin $D_1$ -d<sub>4</sub>

Item No. 312000

| Formal Name:            | 9α,15S-dihydroxy-11-oxo-prost-13E-en-1-<br>oic-3,3,4,4-d <sub>4</sub> acid  | он д р                                   |
|-------------------------|---|--|
| MF:                     | $C_{20}H_{30}D_4O_5$  | $\dot{\wedge}$                           |
| FW:                     | 358.5   | $\langle \gamma' \rangle \sim \chi \sim$ |
| <b>Chemical Purity:</b> | ≥99%  |  |
| Deuterium               |   |  |
| Incorporation:          | ≥99% deuterated forms (d <sub>1</sub> -d <sub>4</sub> ); ≤1% d <sub>0</sub> | OH                                       |
| Stability:              | ≥1 year at -20°C  |  |
| Supplied as:            | A solution in methyl acetate  |  |

#### Laboratory Procedures

Prostaglandin  $D_1$ -d<sub>4</sub> (PGD<sub>1</sub>-d<sub>4</sub>) contains four deuterium atoms at the 3, 3', 4, and 4' positions. It is intended for use as an internal standard for the quantification of PGD1 by GC- or LC-mass spectrometry (MS). For long term storage, we suggest that  $PGD_1-d_4$  be stored as supplied at -20°C. It should be stable for at least one year.

 $PGD_1$ -d<sub>4</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  $PGD_1$ -d<sub>4</sub> in these solvents is approximately 50 mg/ml.

 $PGD_1$ -d<sub>4</sub> is used as an internal standard for the quantification of  $PGD_1$  by stable isotope dilution MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the weight indicated on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard PGD<sub>1</sub> by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

 $PGD_1$  is the theoretical D-series metabolite of dihomo- $\gamma$ -linolenic acid (DGLA), but to date it has not been isolated as a natural product. It is an inhibitor of ADP-induced platelet aggregation in humans with an IC<sub>50</sub> value of 320 ng/ml, which is about 10-fold less potent than PGD<sub>2</sub>.<sup>1</sup>

#### 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**

For a list of related products please visit: www.caymanchem.com/catalog/312000

#### 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

purpose, suitability and merchantability, which extends beyond the description of use chemicals network symmatrices on the symmetry of the symmet

#### **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