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

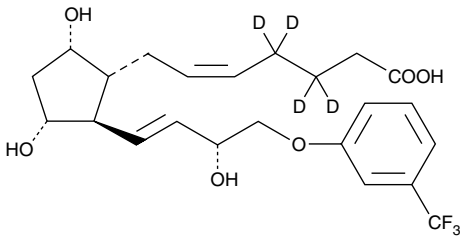
linkedin.com/company/szaboscandic

Product Information

Fluprostenol-d_4

Item No. 316767

Formal Name:	9α,11α,15R-trihydroxy-16-(3-(trifluoromethyl)phenoxy)-17,18,19,20-tetranor-prosta-5Z,13E-dien-1-oic-3,3,4,4-d_4 acid
Synonym:	16-*m*-trifluoromethylphenoxy tetranor Prostaglandin $F_{2\alpha}$-d
MF:	$C_{23}H_{25}D_4F_3O_6$
FW:	462.5
Chemical Purity:	≥98%
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_4); ≤1% d_0
Stability:	≥2 years at -20°C
Supplied as:	A solution in methyl acetate
UV/Vis.:	λ_{max}: 222, 280 nm



Laboratory Procedures

Fluprostenol-d_4 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 Fluprostenol by GC- or LC-mass spectrometry (MS). For long term storage, we suggest that Fluprostenol-d_4 be stored as supplied at -20°C. It should be stable for at least two years.

Fluprostenol-d_4 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 fluprostenol-d_4 in is these solvents is approximately 100 mg/ml.

Fluprostenol-d_4 is used as an internal standard for the quantification of fluprostenol by stable isotope dilution MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Fluprostenol is a metabolically stable analog of prostaglandin $F_{2\alpha}$ ($PGF_{2\alpha}$) with potent FP receptor agonist activity.[1,2] It inhibits $PGF_{2\alpha}$ binding to human and rat FP receptors with IC_{50} values of 3.5 and 7.5 nM, respectively.[1,2] Fluprostenol is a much more potent luteolytic agent than $PGF_{2\alpha}$ in rats with a minimum fully effective dose of 270 µg/kg to terminate pregnancy.[3] It is also an effective inhibitor of rat adipose precursor differentiation in primary cultures with an IC_{50} value of 3-10 x 10^{-11} M.[4]

References

1. Abramovitz, M., Boie, Y., Nguyen, T., *et al.* Cloning and expression of a cDNA for the human prostanoid FP receptor. *J. Biol. Chem.* **269**, 2632-2636 (1994).
2. Lake, S., Gullberg, H., Wahlqvist, J., *et al.* Cloning of the rat and human prostaglandin $F_{2\alpha}$ receptors and the expression of the rat prostaglandin $F_{2\alpha}$ receptor. *FEBS Lett.* **355**, 317-325 (1994).
3. Dukes, M., Russell, W., and Walpole, A.L. Potent luteolytic agents related to prostaglandin $F_{2\alpha}$. *Nature* **250**, 330-331 (1974).
4. Serrero, G. and Lepak, N.M. Prostaglandin $F_{2\alpha}$ receptor (FP receptor) agonists are potent adipose differentiation inhibitors for primary culture of adipocyte precursors in defined medium. *Biochem. Biophys. Res. Commun.* **233**, 200-202 (1997).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/316767

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, 06/18/2012

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