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

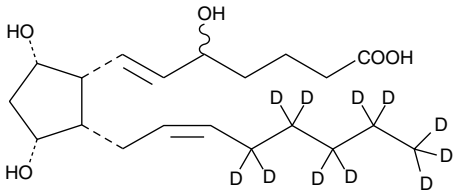
linkedin.com/company/szaboscandic

Product Information

8,12-*iso*-iPF$_{2\alpha}$-VI-d$_{11}$

Item No. 10006878

Formal Name: 5S,5R,9α,11α-trihydroxy-(12α)-prosta-6E,14Z-dien-1-oic-16,16,17,17,18,18,19,19,20,20,20-d$_{11}$ acid
Synonym: 8,12-*epi*-iPF$_{2\alpha}$-VI-d$_{11}$
MF: $C_{20}H_{23}D_{11}O_5$
FW: 365.6
Chemical Purity: ≥95%
Deuterium Incorporation: ≥99% deuterated forms (d$_1$-d$_{11}$); ≤1% d$_0$
Stability: ≥1 year at -80°C
Supplied as: A solution in acetonitrile



Laboratory Procedures

8,12-*iso*-isoprostane-F$_{2\alpha}$-VI-d$_{11}$ (8,12-*iso*-iPF$_{2\alpha}$-VI-d$_{11}$) contains eleven deuterium atoms at the 16, 16', 17, 17', 18, 18', 19, 19', 20, 20, 20 positions. It is intended for use as an internal standard for the quantification of 8,12-*iso*-iPF$_{2\alpha}$-VI by GC- or LC-mass spectrometry (MS). For long term storage, we suggest that 8,12-*iso*-iPF$_{2\alpha}$-VI-d$_{11}$ be stored as supplied at -80°C. It should be stable for at least one year.

8,12-*iso*-iPF$_{2\alpha}$-VI-d$_{11}$ is supplied as a solution in acetonitrile. To change the solvent, simply evaporate the acetonitrile 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 8,12-*iso*-iPF$_{2\alpha}$-VI-d$_{11}$ in these solvents is approxmately 100 mg/ml.

8,12-*iso*-iPF$_{2\alpha}$-VI-d$_{11}$ is used as an internal standard for the quantification of 8,12-*iso*-iPF$_{2\alpha}$-VI 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).

Isoprostanes are non-enzymatic, non-cyclooxygenase prostanoid products of peroxidative damage to membrane lipids.[1] Among the many isoprostane isomers, 8,12-*iso*-iPF$_{2\alpha}$-VI has been demonstrated to be one of the predominant isomers formed and is also present in urine as one of the major isoprostane products.[2] 8,12-*iso*-iPF$_{2\alpha}$-VI-d$_{11}$ is a deuterated internal standard for use in isoprostane quantitation by MS modalities. The compound is diastereomeric at C-5, but is otherwise an optically active, single enantiomer.

References

1. Diaz, M.N., Frei, B., Vita, J.A., *et al.* Antoixidants and atherosclerotic heart disease. *N. Engl. J. Med.* **337**, 408-416 (1997).
2. Lawson, J.A., Li, H., Rokach, J., *et al.* Identification of two major F$_2$ isoprostanes, 8,12-*iso*- and 5-*epi*-8,12-*iso*-isoprostane F$_{2\alpha}$-VI, in human urine. *J. Biol. Chem.* **273**, 29295-29301 (1998).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10006878

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