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

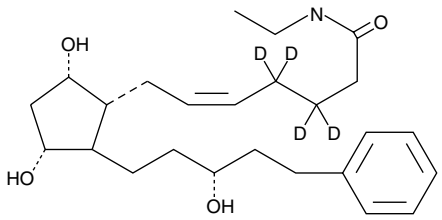
linkedin.com/company/szaboscandic

Product Information

Latanoprost ethyl amide-d_4

Item No. 316822

Formal Name:	N-ethyl-9α,11α,15S-trihydroxy-17-phenyl-18,19,20-trinor-prost-5Z-en-1-amide-3,3,4,4-d_4
Synonym:	Lat-NEt-d_4
MF:	$C_{25}H_{34}D_4NO_4$
FW:	420.6
Chemical Purity:	≥98%
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_4); ≤1% d_0
Stability:	≥1 year at -20°C
Supplied as:	A solution in ethanol



Laboratory Procedures

Latanoprost ethyl amide-d_4 (Lat-NEt-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 latanoprost by GC- or LC-mass spectrometry (MS). For long term storage, we suggest that Lat-NEt-d_4 be stored as supplied at -20°C. It will be stable for at least one year.

Lat-NEt-d_4 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 and dimethyl formamide purged with an inert gas can be used. The solubility of Lat-NEt-d_4 in these solvents is approximately 50 and 30 mg/ml, respectively.

Lat-NEt-d_4 is used as an internal standard for the quantification of Lat-NEt 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).

Lat-NEt is an F-series prostaglandin (PG) analog in which the C-1 carboxyl group has been modified to an N-ethyl amide. PG esters have been shown to have ocular hypotensive activity.[1] PG N-ethyl amides were recently introduced as alternative PG ocular hypotensive prodrugs.[2] Although it has been claimed that PG ethyl amides are not converted to the free acids *in vivo*,[2] studies in our laboratories have shown that bovine and human corneal tissue converts the N-ethyl amides of various PGs to the free acids with a conversion rate of about 2.5 µg/g corneal tissue/hr.[3] Lat-NEt would be expected to show the typical intraocular effects of Lat free acid, but with the much slower hydrolysis pharmacokinetics of the PG N-amides.

References

1. Bito, L.Z. Comparison of the ocular hypotensive efficacy of eicosanoids and related compounds. *Exp. Eye Res.* **38**, 181-184 (1984).
2. Woodward, D.F., Krauss, A.H.-P., Chen, J., *et al.* The pharmacology of Bimatoprost (Lumigan™). *Survey of Ophthalmology* **45**, S337-S345 (2001).
3. Maxey, K.M., Johnson, J., Camras, C.B., *et al.* The hydrolysis of bimatoprost in corneal tissue generates a potent prostanoid FP receptor agonist. *Survey of Ophthalmology* **47(4)**, 34-40 (2002).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/316822

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