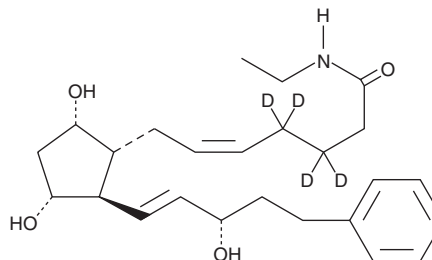


PRODUCT INFORMATION



17-phenyl trinor Prostaglandin F_{2α} ethyl amide-d₄ Item No. 316820

Formal Name:	N-ethyl-9α,11α,15S-trihydroxy-17-phenyl-18,19,20-trinor-prosta-5Z,13E-dien-1-amide-3,3,4,4-d ₄
Synonyms:	Bimatoprost-d ₄ , 15(S)-Bimatoprost-d ₄ , 17-phenyl trinor PGF _{2α} ethyl amide-d ₄
MF:	C ₂₅ H ₃₃ D ₄ NO ₄
FW:	419.6
Chemical Purity:	≥95% (17-phenyl trinor Prostaglandin F _{2α} ethyl amide)
Deuterium Incorporation:	≥99% deuterated forms (d ₁ -d ₄); ≤1% d ₀
Supplied as:	A solution in methyl acetate
Storage:	-20°C
Stability:	≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

17-phenyl trinor Prostaglandin F_{2α} ethyl amide-d₄ (17-phenyl trinor PGF_{2α} ethyl amide-d₄) is intended for use as an internal standard for the quantification of 17-phenyl trinor PGF_{2α} ethyl amide (Item No. 16820) by GC- or LC-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).

17-phenyl trinor PGF_{2α} ethyl amide-d₄ 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 (DMF) purged with an inert gas can be used. The solubility of 17-phenyl trinor PGF_{2α} ethyl amide-d₄ in ethanol is approximately 30 mg/ml and approximately 25 mg/ml in DMSO and DMF.

Description

17-phenyl trinor Prostaglandin F_{2α} ethyl amide (17-phenyl trinor PGF_{2α} ethyl amide) is an F-series prostaglandin derivative and an agonist of FP receptors.^{1,2} It induces calcium mobilization in 3T3-L1 fibroblasts expressing the human receptors (EC₅₀ = 2.2 μM).¹ Ocular administration of 17-phenyl trinor PGF_{2α} ethyl amide (0.03% w/v) reduces intraocular eye pressure (IOP) in normotensive dogs and ocular hypertensive monkeys.² Formulations containing 17-phenyl trinor PGF_{2α} ethyl amide have been used in the treatment of open angle glaucoma, ocular hypertension, and eyelash hypotrichosis.

References

1. Sharif, N.A., Williams, G.W., and Kelly, C.R. Bimatoprost and its free acid are prostaglandin FP receptor agonists. *Eur. J. Pharmacol.* **432(2-3)**, 211-213 (2001).
2. Woodward, D.F., Krauss, A.H., Chen, J., et al. The pharmacology of bimatoprost (Lumigan™). *Surv. Ophthalmol.* **45(Suppl 4)**, S337-S345 (2001).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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