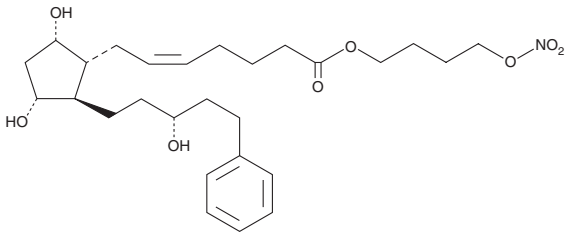
PRODUCT INFORMATION

Latanoprostene Bunod

Item No. 25830

CAS Registry No.: 860005-21-6
Formal Name: (5Z)-7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-5-heptenoic acid, 4-(nitrooxy)butyl ester
Synonyms: BOL-303259-X, NCX 116, PF-3187207
MF: $C_{27}H_{41}NO_8$
FW: 507.6
Purity: ≥95%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥1 year



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

Laboratory Procedures

Latanoprostene bunod 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 latanoprostene bunod in these solvents is approximately 30 mg/ml.

Latanoprostene bunod is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of latanoprostene bunod should be diluted with the aqueous buffer of choice. Latanoprostene bunod has a solubility of approximately 0.33 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method.

Description

Latanoprostene bunod is a nitric oxide-donating prostaglandin $F_{2\alpha}$ (FP) receptor agonist that is converted to latanoprost (free acid) (Item No. 16811) and nitric oxide (NO) *in vivo*.[1] It induces cGMP accumulation in PC12 and HEK293 cells (EC_{50}s = 1.6 and 9.2 µM, respectively). Topical administration of latanoprostene bunod (0.036% solution) reduces intraocular pressure (IOP) in canine and rabbit models of glaucoma. It also decreases IOP in a cynomolgus monkey model of laser-induced ocular hypertension.

Reference

1. Krauss, A.H.P., Impagnatiello, F., Toris, C.B., *et al.* Ocular hypotensive activity of BOL-303259-X, a nitric oxide donating prostaglandin F2α agonist, in preclinical models. *Exp. Eye Res.* **93(3)**, 250-255 (2011).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM