

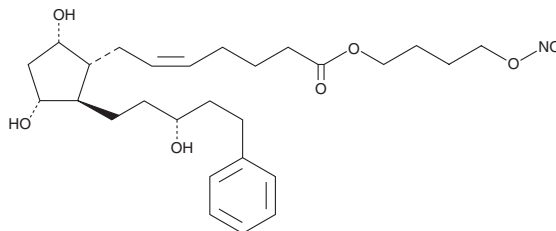
# PRODUCT INFORMATION



## 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<sub>27</sub>H<sub>41</sub>NO<sub>8</sub>  
**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<sub>2α</sub> (FP) receptor agonist that is converted to latanoprost (free acid) (Item No. 16811) and nitric oxide (NO) *in vivo*.<sup>1</sup> It induces cGMP accumulation in PC12 and HEK293 cells (EC<sub>50</sub>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 F<sub>2α</sub> agonist, in preclinical models. *Exp. Eye Res.* **93(3)**, 250-255 (2011).

#### 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.

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