

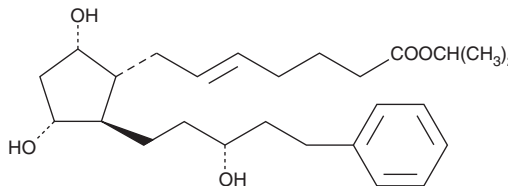
PRODUCT INFORMATION



5-*trans* Latanoprost

Item No. 16813

CAS Registry No.: 913258-34-1
Formal Name: (5*E*)-7-[(1*R*,2*R*,3*R*,5*S*)-3,5-dihydroxy-2-[(3*R*)-3-hydroxy-5-phenylpentyl]cyclopentyl]-5-heptenoic acid, 1-methylethyl ester
Synonym: 5,6-*trans* Latanoprost
MF: C₂₆H₄₀O₅
FW: 432.6
Purity: ≥98%
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

5-*trans* Latanoprost 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 DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of 5-*trans* latanoprost in these solvents is approximately 50 and 100 mg/ml, respectively. 5-*trans* Latanoprost is miscible in ethanol.

5-*trans* Latanoprost is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 5-*trans* latanoprost should be diluted with the aqueous buffer of choice. The solubility of 5-*trans* latanoprost in PBS (pH 7.2) is approximately 1.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

5-*trans* Latanoprost is a derivative of the FP receptor agonist latanoprost (free acid) (Item No. 16811) and the *trans* isomer of latanoprost (Item No. 16812).¹ Like other *trans* isomers of F-type prostaglandins, 5-*trans* latanoprost may have similar FP receptor activation and intraocular pressure reduction activities as the *cis* isomer. 5-*trans* Latanoprost is a potential impurity in commercial preparations of latanoprost. This product is intended as an analytical standard for the detection and quantification of this impurity.

Reference

1. Asendrych-Wicik, K., Zarczuk, J., Walaszek, K., *et al.* Trends in development and quality assessment of pharmaceutical formulations - F2α analogues in the glaucoma treatment. *Eur. J. Pharm. Sci.* **180**, 106315 (2023).

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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