

PRODUCT INFORMATION



Tafluprost

Item No. 10005440

CAS Registry No.: 209860-87-7

Formal Name: (5Z)-7-[(1R,2R,3R,5S)-2-[(1E)-3,3-difluoro-4-phenoxy-1-buten-1-yl]-3,5-dihydroxycyclopentyl]-5-heptenoic acid, 1-methylethyl ester

Synonym: AFP-168

MF: $C_{25}H_{34}F_2O_5$

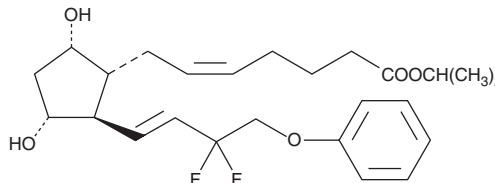
FW: 452.5

Purity: $\geq 98\%$

Storage: $-20^{\circ}C$

Stability: ≥ 2 years

Supplied as: A solution in ethanol



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

Laboratory Procedures

Tafluprost 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 tafluprost in these solvents is at least 30 mg/ml.

Description

Tafluprost is a prodrug form of the FP receptor agonist tafluprost (free acid) (Item No. 10005439) and a derivative of prostaglandin $F_{2\alpha}$ ($PGF_{2\alpha}$; Item Nos. 16010 | 16020).¹ It decreases pupillary diameter in cats when applied topically at doses of 0.0001 or 0.001% v/v. Ocular administration of tafluprost (0.0005% v/v) reduces intraocular pressure in normotensive monkeys. Formulations containing tafluprost have been used in the treatment of open-angle glaucoma and ocular hypertension.

Reference

1. Nakajima, T., Matsugi, T., Goto, W., et al. New fluoroprostaglandin $F_{2\alpha}$ derivatives with prostanoid FP-receptor agonistic activity as potent ocular-hypotensive agents. *Biol. Pharm. Bull.* **26(12)**, 1691-1695 (2003).

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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