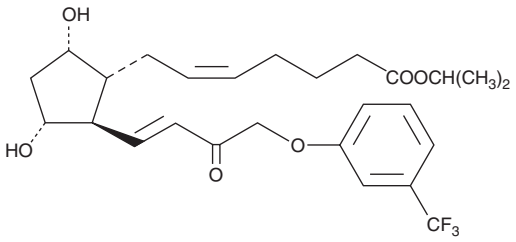
PRODUCT INFORMATION

15-keto Fluprostenol isopropyl ester

Item No. 16786

CAS Registry No.:	404830-45-1
Formal Name:	(5Z)-7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(1E)-3-oxo-4-[3-(trifluoromethyl)phenoxy]-1-buten-1-yl]cyclopentyl]-5-heptenoic acid, 1-methylethyl ester
Synonym:	15-keto Travoprost
MF:	$C_{26}H_{33}F_3O_6$
FW:	498.5
Purity:	≥98%
UV/Vis.:	λ_{max}: 224 nm
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

15-keto Fluprostenol isopropyl ester (15-keto Travoprost) 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 purged with an inert gas can be used. The solubility of 15-keto travoprost in these solvents is approximately 100 mg/ml.

15-keto Travoprost is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 15-keto travoprost should be diluted with the aqueous buffer of choice. The solubility of 15-keto travoprost in PBS (pH 7.2) is approximately 16 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

15-keto Fluprostenol isopropyl ester is an ester derivative of the FP receptor agonist fluprostenol (Item No. 16768) that is oxidized at carbon 15. It is a potential inactive metabolite of fluprostenol isopropyl ester (travoprost; Item No. 16769) based on the published metabolism of latanoprost (Item No. 16812) by 15-hydroxyprostaglandin dehydrogenase in the monkey cornea.[1] 15-keto Fluprostenol isopropyl ester is a potential impurity found in commercial preparations of fluprostenol isopropyl ester.[2]

References

1. Fujimori, K., Okada, T., and Urade, Y. Expression of $NADP^+$-dependent 15-hydroxyprostaglandin dehydrogenase mRNA in monkey ocular tissues and characterization of its recombinant enzyme. *J. Biochem.* **131(3)**, 383-389 (2002).
2. 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).

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