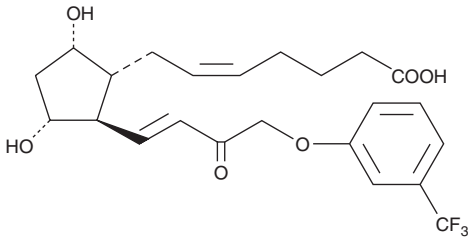
PRODUCT INFORMATION

15-keto Fluprostenol

Item No. 16785

Formal Name:	(±)15-oxo-9α,11α-dihydroxy-16,16-(3-(trifluoromethyl) phenoxy)-17,18,19,20-tetranor-prosta-5Z,13E-dien-1-oic acid
MF:	$C_{23}H_{27}F_3O_6$
FW:	456.5
Purity:	≥98%
UV/Vis.:	λ_{max}: 225 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 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 fluprostenol in these solvents is approximately 100 mg/ml.

15-keto Fluprostenol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 15-keto fluprostenol should be diluted with the aqueous buffer of choice. The solubility of 15-keto fluprostenol in PBS (pH 7.2) is approximately 20 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

15-keto Fluprostenol is a derivative of the FP receptor agonist fluprostenol (Item No. 16768) that is oxidized at carbon 15. It is a potential inactive metabolite of 15-keto fluprostenol isopropyl ester (Item No. 16786). It is also a potential metabolite of fluprostenol based on the published metabolism of latanoprost (Item No. 16812) by 15-hydroxyprostaglandin dehydrogenase in the monkey cornea.[1] 15-keto Fluprostenol is a potential pharmaceutical impurity found in commercial preparations of fluprostenol.[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