

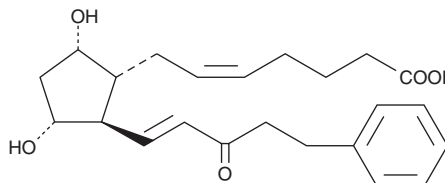
PRODUCT INFORMATION



15-keto-17-phenyl trinor Prostaglandin F_{2α}

Item No. 16817

CAS Registry No.: 949564-89-0
Formal Name: (5Z)-7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(1E)-3-oxo-5-phenyl-1-penten-1-yl]cyclopentyl]-5-heptenoic acid
Synonym: 15-keto-17-phenyl trinor PGF_{2α}
MF: C₂₃H₃₀O₅
FW: 386.5
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

15-keto-17-phenyl trinor Prostaglandin F_{2α} (15-keto-17-phenyl trinor PGF_{2α}) 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 (DMF) purged with an inert gas can be used. The solubility of 15-keto-17-phenyl trinor PGF_{2α} in ethanol and DMF is approximately 30 mg/ml and approximately 25 mg/ml in DMSO.

15-keto-17-phenyl trinor PGF_{2α} is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 15-keto-17-phenyl trinor PGF_{2α} should be diluted with the aqueous buffer of choice. The solubility of 15-keto-17-phenyl trinor PGF_{2α} in PBS (pH 7.2) is approximately 2.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

15-keto-17-phenyl trinor PGF_{2α} is a keto derivative of an F-series prostaglandin and a metabolite of the prostaglandin FP receptor agonist 17-phenyl trinor PGF_{2α} ethyl amide (Item No. 16820).^{1,2} It is formed from 17-phenyl trinor PGF_{2α} ethyl amide by 15-prostaglandin dehydrogenase (15-PGDH) and amidases via a 15-keto-17-phenyl trinor PGF_{2α} ethyl amide (Item No. 10010405) intermediate.²

References

1. Basu, S. and Stjernschantz, J. Δ^{13} -reductase dependent metabolism of prostaglandins in the mammalian brain and eye. *Prostaglandins Leukot. Essent. Fatty Acids* **57(3)**, 305-310 (1997).
2. Zezula, M., Ruszczak, M., Maruszak, W., et al. Development and validation of the stability indicating RP-UHPLC method for the determination of the chemical purity and assay of bimatoprost. *J. Pharm. Biomed. Anal.* **174**, 348-359 (2019).

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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