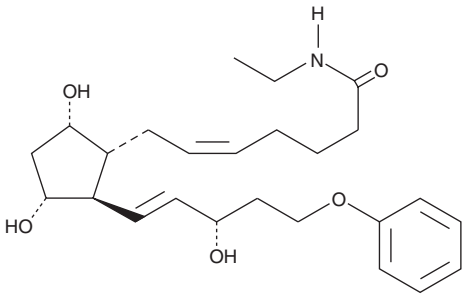
PRODUCT INFORMATION

17-phenoxy trinor Prostaglandin $F_{2\alpha}$ ethyl amide

Item No. 10010742

CAS Registry No.: 1421369-12-1
Formal Name: N-ethyl-9α,11α,15S-trihydroxy-17-phenoxy-18,19,20-trinor-prosta-5Z,13E-dien-1-amide
Synonyms: 17-phenoxy trinor $PGF_{2\alpha}$ ethyl amide
MF: $C_{25}H_{37}NO_5$
FW: 431.6
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

17-phenoxy trinor Prostaglandin $F_{2\alpha}$ ($PGF_{2\alpha}$) ethyl amide, 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 17-phenoxy trinor $PGF_{2\alpha}$ ethyl amide in these solvents is approximately 50 mg/ml.

17-phenoxy trinor $PGF_{2\alpha}$ ethyl amide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 17-phenoxy trinor $PGF_{2\alpha}$ ethyl amide should be diluted with the aqueous buffer of choice. The solubility of 17-phenoxy trinor $PGF_{2\alpha}$ ethyl amide in PBS (pH 7.2) is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

$PGF_{2\alpha}$, acting through the FP receptor, causes smooth muscle contraction and exhibits potent luteolytic activity.[1-3] Both 17-phenyl trinor $PGF_{2\alpha}$ and 16-phenoxy tetranor $PGF_{2\alpha}$ are metabolically stable analogs of $PGF_{2\alpha}$ and potent agonists for the FP receptor.{2058} 17-phenoxy trinor $PGF_{2\alpha}$ ethyl amide is a lipophilic analog of 17-phenoxy trinor $PGF_{2\alpha}$ (Item No. 10010839). Ethyl amides of PGs serve as prodrugs, as they are hydrolyzed in certain tissues to generate the bioactive free acid.

References

1. Samuelsson, B., Goldyne, M., Granström, E., *et al.* Prostaglandins and thromboxanes. *Annu. Rev. Biochem.* **47**, 997-1029 (1978).
2. Speroff, L. and Ramwell, P.W. Prostaglandins in reproductive physiology. *Am. J. Obstet. Gynecol.* **107(7)**, 1111-1130 (1970).
3. Crankshaw, D.J. and Gaspar, V. Pharmacological characterization *in vitro* of prostanoid receptors in the myometrium of nonpregnant ewes. *J. Reprod. Fertil.* **103(1)**, 55-61 (1995).
4. Balapure, A.K., Rexroad, C.E., Jr., Kawada, K., *et al.* Structural requirements for prostaglandin analog interaction with the ovine corpus luteum prostaglandin $F_{2\alpha}$ receptor. *Biochem. Pharmacol.* **38(14)**, 2375-2381 (1989).

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