PRODUCT INFORMATION



15(S)-15-methyl Prostaglandin $F_{2\alpha}$ ethyl amide

Item No. 10010064

Formal Name: 9a,11a,15S-trihydroxy-15-methyl-prosta-

5Z,13E-dien-1-oic acid, ethyl amide

Synonym: 15(S)-15-methyl PGF_{2 α} ethyl amide

MF: FW: 395.6 **Purity:**

Supplied as:

Storage: -20°C Stability:

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

C₂₃H₄₁NO₄ ≥98% A solution in ethanol ≥2 years

Laboratory Procedures

15(S)-15-methyl Prostaglandin $F_{2\alpha}$ is supplied as a solution in ethanol. To change the solvent, simply evaporate the 15(S)-15-methyl prostaglandin F_{2a} 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(S)-15-methyl prostaglandin $\rm F_{2\alpha}$ in these solvents is approximately 50 mg/ml.

15(S)-15-methyl Prostaglandin $F_{2\alpha}$ is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the 15(S)-15-methyl prostaglandin $F_{2\alpha}$ solution of ethanol should be diluted with the aqueous buffer of choice. The solubility of 15(S)-15-methyl prostaglandin $F_{2\alpha}$ 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

15(S)-15-methyl Prostaglandin $F_{2\alpha}$ has been shown to have potent uterine stimulant and abortifacient properties when administered intramuscularly to induce labor. 1,2 15(S)-15-methyl PGF $_{2\alpha}$ ethyl amide is a lipophilic analog of 15(S)-15-methyl PGF $_{2\alpha}$ methyl ester. Prostaglandin esters are generally hydrolyzed to the free acid upon *in vivo* administration, making the methyl esters useful prodrugs.³ Hydrolysis of prostaglandin amides in vivo is not thoroughly established.

References

- 1. Carlan, S.J., Gushwa, J.P., O'Brien, W.F., et al. Effect of intramuscular 15-methyl prostaglandin F_{2a} after second-trimester delivery. Obstet. Gynecol. 89, 5-9 (1997).
- Lindblom, B., Källfelt, B., Hahlin, M., et al. Local prostaglandin F_{2a} injection for termination of ectopic pregnancy. Lancet 776-777 (1987).
- Miller, W.L. and Sutton, M.J. Relative biological activity of certain prostaglandins and their enantiomers. Prostaglandins 11, 77-84 (1976).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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