PRODUCT INFORMATION

15(S)-15-methyl Prostaglandin F$_{2\alpha}$ methyl ester
Item No. 16744

CAS Registry No.: 35700-21-1
Formal Name: 9α,11α,15S-trihydroxy-15-methyl-prosta-
5Z,13E-dien-1-oic acid, methyl ester
Synonyms: Methyl carboprost,
15(S)-15-methyl PGF$_{2\alpha}$ methyl ester,
U-36384
MF: C$_{22}$H$_{38}$O$_5$
FW: 382.5
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥1 year

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

Laboratory Procedures

15(S)-15-methyl Prostaglandin F$_{2\alpha}$ methyl ester (15(S)-15-methyl PGF$_{2\alpha}$ methyl ester) is supplied as a crystalline solid. A stock solution may be made by dissolving the 15(S)-15-methyl PGF$_{2\alpha}$ methyl ester in the solvent of choice, which should be purged with an inert gas. 15(S)-15-methyl PGF$_{2\alpha}$ methyl ester is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 15(S)-15-methyl PGF$_{2\alpha}$ methyl ester in these solvents is approximately 50 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 15(S)-15-methyl PGF$_{2\alpha}$ methyl ester can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 15(S)-15-methyl PGF$_{2\alpha}$ methyl ester in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

15(S)-15-methyl PGF$_{2\alpha}$ methyl ester is a derivative of 15(S)-15-methyl PGF$_{2\alpha}$ with increased membrane permeability.1,2 Hydrolysis of the methyl ester in vivo releases the biologically active 15(S)-15-methyl PGF$_{2\alpha}$, which is a potent uterine stimulant and abortifacient.3-5

References