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-$5\beta$Z,13E-dien-1-ol acid, methyl ester

Synonyms: Methyl carboprost, U-36384

MF: C$_{22}$H$_{38}$O$_{5}$

FW: 382.5

Purity: ≥98%

Stability: ≥1 year at -20°C

Supplied as: A crystalline solid

Laboratory Procedures

For long term storage, we suggest that 15(S)-15-methyl Prostaglandin F$_{2\alpha}$ methyl ester (methyl carboprost) be stored as supplied at -20°C. It will be stable for at least one year.

Methyl carboprost is supplied as a crystalline solid. A stock solution may be made by dissolving the methyl carboprost in an organic solvent. Methyl carboprost is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of methyl carboprost 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 methyl carboprost can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of methyl carboprost in PBS (pH 7.2) is approximately 5 mg/ml. Avoid adding methyl carboprost to strongly acidic buffers as the compound will undergo racemization at C15. We do not recommend storing the aqueous solution for more than one day.

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.3,4,5

References


WARNING

Abortifacient. Pregnant females should avoid any contact with this compound. Exposure can lead to premature labor, uterine contraction, cramping, diarrhea, and premature delivery of the conceptus. Read the complete MSDS before handling or using methyl carboprost.

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/16744

**WARNING:** This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.

**MATERIAL SAFETY DATA**

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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