PRODUCT INFORMATION



СООН

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9-deoxy-9-methylene-16,16-dimethyl Prostaglandin E₂

Item No. 14420

CAS Registry No.: 61263-35-2

Formal Name: 11α,15R-dihydroxy-16,16-dimethyl-9-

methylene-prosta-5Z,13E-dien-1-oic acid

Synonyms: Meteneprost,

9-deoxy-9-methylene-16,16-dimethyl PGE₂

MF: $C_{23}H_{38}O_4$ FW: 378.6 **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

9-deoxy-9-methylene-16,16-dimethyl Prostaglandin E_2 (Meteneprost) 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 purged with an inert gas can be used. The solubility of meteneprost in these solvents is approximately 100 mg/ml.

Meteneprost is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of meteneprost should be diluted with the agueous buffer of choice. The solubility of meteneprost in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Meteneprost is a potent analog of prostaglandin E2 (PGE2; Item No. 14010) with an extended half life, in vivo. In combination with various other PG derivatives, meteneprost results in the termination of first trimester pregnancy in monkeys. A single intramuscular injection containing 0.5 mg of meteneprost and 7.5 mg of 17-phenyl trinor $PGF_{1\alpha}$ is very effective in terminating early pregnancy. This PGmixture is ineffective on monkeys in their third trimester of pregnancy. 1 Meteneprost, when compared to PGE2 and PGF1a, in monkey and rat, does not result in unwanted side effects such as fever or gastrointestinal problems. 1,2

References

- 1. Wilks, J.W. Pregnancy interception with a combination of prostaglandins: Studies in monkeys. Science 221(4618), 1407-1409 (1983).
- 2. Bundy, G.L., Kimball, F.A., Robert, A., et al. Synthesis and biological activity of 9-deoxo-9-methylene and related prostaglandins. Adv. Prostaglandin Thromboxane Res. 6, 355-363 (1980).

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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