

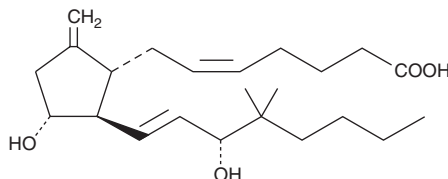
PRODUCT INFORMATION



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

Item No. 14420

CAS Registry No.: 61263-35-2
Formal Name: 9-methylene-11 α ,15R-dihydroxy-16,16-dimethyl-prosta-5Z,13E-dien-1-oic acid
Synonyms: 9-deoxy-9-methylene-16,16-dimethyl PGE₂, Meteneprost
MF: C₂₃H₃₈O₄
FW: 378.6
Purity: \geq 98%
Stability: \geq 1 year at -20°C
Supplied as: A solution in methyl acetate



Laboratory Procedures

For long term storage, we suggest that 9-deoxy-9-methylene-16,16-dimethyl prostaglandin E₂ (meteneprost) be stored as supplied at -20°C. It should be stable for at least one year.

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.

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. If an organic solvent-free solution of meteneprost is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. 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 α} is very effective in terminating early pregnancy.¹ This PG mixture is ineffective on monkeys in their third trimester of pregnancy.¹ Meteneprost, when compared to PGE₂ and PGF_{1 α} , 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**, 1407-1409 (1983).
2. Bundy, G.L., Kimball, F.A., Robert, A., *et al.* Synthesis and biological activity of 9-deoxy-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.

SAFETY DATA

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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