PRODUCT INFORMATION



13,14-dihydro-15-keto Prostaglandin J₂

Item No. 10008840

Formal Name: 11,15-dioxo-prosta-5Z,9-en-1-oic acid

MF: $C_{20}H_{30}O_4$ FW: 334.5 **Purity:** ≥97%

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

13,14-dihydro-15-keto Prostaglandin J₂ (PGJ₂) 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 13,14-dihydro-15-keto PGJ₂ 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. If an organic solvent-free solution of 13,14-dihydro-15-keto PGJ₂ is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 13,14-dihydro-15-keto PGJ2 in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Various biological properties exist for both PGJ₂ and its metabolites such as inhibition of platelet aggregation, antitumor, and antiviral activity. 1,2 13,1 4 -dihydro-15-keto PGJ₂ is the dehydration product of 13,14-dihydro-15-keto PGD₂ and is a presumed metabolite of PGJ₂ via the 15-hydroxy PG dehydrogenase pathway. There are no published studies of the pharmacological properties or the formation of 13,14-dihydro-15-keto PGJ₂ in vivo.

References

- 1. Bundy, G.L., Morton, D.R., Peterson, D.C., et al. Synthesis and platelet aggregation inhibiting activity of prostaglandin D analogues. J. Med. Chem. 26, 70-799 (1983).
- 2. Kato, T., Fukushima, M., Kurozumi, S., et al. Antitumor activity of Δ^7 -prostaglandin A_1 and Δ^{12} -prostaglandin J₂ in vitro and in vivo. Cancer Res. **46**, 3538-3542 (1986).

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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