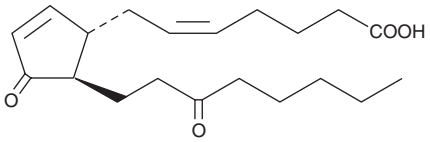
PRODUCT INFORMATION

13,14-dihydro-15-keto Prostaglandin J_2

Item No. 10008840

CAS Registry No.: 2230717-14-1
Formal Name: 11,15-dioxo-prosta-5Z,9-dien-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 J_2 (PGJ_2) 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 PGJ_2 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 PGJ_2 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 PGJ_2 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 PGJ_2 and its metabolites such as inhibition of platelet aggregation, antitumor, and antiviral activity.[1,2] 13,14-dihydro-15-keto PGJ_2 is the dehydration product of 13,14-dihydro-15-keto PGD_2 and is a presumed metabolite of PGJ_2 *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 PGJ_2 *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 J_2 *in vitro* and *in vivo*. *Cancer Res.* **46**, 3538-3542 (1986).

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