Product Information

11-deoxy-11-methylene-15-keto Prostaglandin D₂
Item No. 12415

CAS Registry No.: 958759-75-6
Formal Name: 9α-hydroxy-11-methylene-15-oxo-prosta-5Z,13E-dien-1-0ic acid
MF: C₂₁H₃₂O₄
FW: 348.5
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A solution in methyl acetate
UV/Vis: λ_{max}: 234 nm

Laboratory Procedures

For long term storage, we suggest that 11-deoxy-11-methylene-15-keto Prostaglandin D₂ (11-deoxy-11-methylene-15-keto PGD₂) be stored as supplied at -20°C. It will be stable for at least one year.

11-deoxy-11-methylene-15-keto PGD₂ 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 11-deoxy-11-methylene-15-keto PGD₂ 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 11-deoxy-11-methylene-15-keto PGD₂ is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 11-deoxy-11-methylene-15-keto PGD₂ in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

PGD₂ is one of the five primary enzymatic prostaglandins derived directly from PGH₂. The biological effects of PGD₂ are transduced in vitro by a classical 7-transmembrane GPCR, the DP receptor. However, a second receptor, the chemokine-related CRTH2 receptor, also binds PGD₂. This new receptor was recently identified on human eosinophils, where it binds selectively the PGD₂ metabolite 13,14-dihydro-15-keto PGD₂. 11-deoxy-11-methylene-15-keto PGD₂ was prepared as a more chemically stable ligand for this receptor. There are no published studies of the pharmacological properties of 11-deoxy-11-methylene-15-keto PGD₂.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/12415

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Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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