13,14-dihydro-16,16-difluoro Prostaglandin J2
Item No. 13635

Formal Name: 11-oxo-15S-hydroxy-16,16-difluoro-
5Z,9-dien-1-oic acid
Synonym: 13,14-dihydro-16,16-difluoro PGJ2
MF: C20H30F2O4
FW: 372.5
Purity: ≥95%
Stability: ≥1 year at -20°C
Supplied as: A solution in methyl acetate

Laboratory Procedures
For long term storage, we suggest that 13,14-dihydro-16,16-difluoro prostaglandin J2 (13,14-dihydro-16,16-difluoro PGJ2) be stored as supplied at -20°C. It should be stable for at least one year.

13,14-dihydro-16,16-difluoro 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-16,16-difluoro PGJ2 in these solvents is approximately 10 mg/ml.

13,14-dihydro-16,16-difluoro PGJ2 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 13,14-dihydro-16,16-difluoro PGJ2 should be diluted with the aqueous buffer of choice. 13,14-dihydro-16,16-difluoro PGJ2 has a solubility of approximately 0.1 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Prostaglandin J2 (PGJ2) is an analog of PGD2 that can inhibit both platelet aggregation and cell growth.1,3 However, it is not clear whether these effects are initiated by PGJ2 or a derivative. 13,14-dihydro-16,16-difluoro PGJ2 is an analog of PGJ2. While its biological activities have not been evaluated, it should be noted that the addition of two electron-withdrawing fluorine atoms has been used to stabilize prostanoids and significantly delay degradation in vitro.4 Importantly, 13,14-dihydro PGE1, has activity that is comparable to that of PGE1, suggesting that this analog of PGJ2 could be biologically active.5,6

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/13635

Material Safety Data
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly if any material contacts your skin, eyes, or clothing. This material is flammable and incompatible with acids, bases, oxidizing agents, reducing agents, and metal powders.

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