

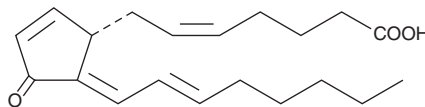
PRODUCT INFORMATION



15-deoxy- $\Delta^{12,14}$ -Prostaglandin J₂

Item No. 18570

CAS Registry No.: 87893-55-8
Formal Name: 11-oxo-prosta-5Z,9,12E,14E-tetraen-1-oic acid
Synonym: 15-deoxy- $\Delta^{12,14}$ -PGJ₂
MF: C₂₀H₂₈O₃
FW: 316.4
Purity: $\geq 95\%$
UV/Vis.: λ_{\max} : 229, 306 nm
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

15-deoxy- $\Delta^{12,14}$ -Prostaglandin J₂ (15-deoxy- $\Delta^{12,14}$ -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 15-deoxy- $\Delta^{12,14}$ -PGJ₂ in these solvents is approximately 75, 20, and 100 mg/ml, respectively.

15-deoxy- $\Delta^{12,14}$ -PGJ₂ is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 15-deoxy- $\Delta^{12,14}$ -PGJ₂ should be diluted with the aqueous buffer of choice. The solubility of 15-deoxy- $\Delta^{12,14}$ -PGJ₂ in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

15-deoxy- $\Delta^{12,14}$ -PGJ₂ is formed from PGD₂ by the elimination of two molecules of water. It binds selectively to PPAR γ with an EC₅₀ value of 2 μ M in a murine chimera system.^{1,2} 15-deoxy- $\Delta^{12,14}$ -PGJ₂ is more potent than PGD₂, Δ^{12} -PGJ₂, and PGJ₂ in stimulating lipogenesis in C3H10T1/2 cells. The EC₅₀ for induction of adipocyte differentiation in cultured fibroblasts is 7 μ M.¹

References

1. Kliewer, S.A., Lenhard, J.M., Willson, T.M., *et al.* A prostaglandin J₂ metabolite binds peroxisome proliferator-activated receptor γ and promotes adipocyte differentiation. *Cell* **83**(5), 813-819 (1995).
2. Forman, B.M., Tontonoz, P., Chen, J., *et al.* 15-Deoxy- $\Delta^{12,14}$ -prostaglandin J₂ is a ligand for the adipocyte determination factor PPAR γ . *Cell* **83**(5), 803-812 (1995).

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.

WARRANTY AND LIMITATION OF REMEDY

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