

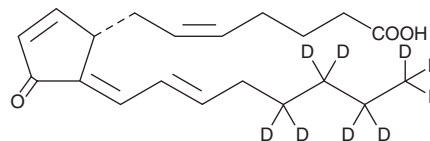
PRODUCT INFORMATION



15-deoxy- $\Delta^{12,14}$ -Prostaglandin J₂-d₉

Item No. 19347

Formal Name: 11-oxo-prosta-5Z,9,12E,14E-tetraen-1-oic acid-d₉
Synonym: 15-deoxy- $\Delta^{12,14}$ -PGJ₂-d₉
MF: C₂₀H₁₉D₉O₃
FW: 325.5
Chemical Purity: ≥95% (15-deoxy- $\Delta^{12,14}$ -Prostaglandin J₂)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₉); ≤1% d₀
Supplied as: A 1 mg/ml 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-d₉ (15-deoxy- $\Delta^{12,14}$ -PGJ₂-d₉) is intended for use as an internal standard for the quantification of 15-deoxy- $\Delta^{12,14}$ -PGJ₂ (Item No. 18570 | 18570.1) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

15-deoxy- $\Delta^{12,14}$ -PGJ₂-d₉ 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-d₉ in these solvents is approximately 50 mg/ml.

Description

15-deoxy- $\Delta^{12,14}$ -PGJ₂ is formed from PGD₂ (Item No. 12010) 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 (Item No. 18550), and PGJ₂ (Item No. 18500) 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.

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