

Product Information

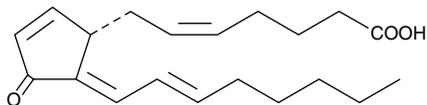


15-deoxy- $\Delta^{12,14}$ -Prostaglandin J₂ Quant-PAK

Item No. 10006850

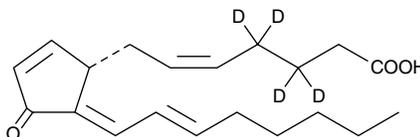
15-deoxy- $\Delta^{12,14}$ -Prostaglandin J₂

CAS Registry No.: 87893-55-8
Formal Name: 11-oxo-prosta-5Z,9,12E,14Z-tetraen-1-oic acid
MF: C₂₀H₂₈O₃
FW: 316.4
Purity: ≥97%
Stability: ≥1 year at -20°C
Supplied as: A solution in methyl acetate
UV/Vis.: λ_{max}: 229, 306 nm ε: 12,000 (at 306 nm)



15-deoxy- $\Delta^{12,14}$ -Prostaglandin J₂-d₄

CAS Registry No.: 1542166-82-4
Formal Name: 11-oxo-prosta-5Z,9,12E,14Z-tetraen-1-oic-3,3,4,4-d₄ acid
MF: C₂₀H₂₄D₄O₃
FW: 320.5
Chemical Purity: ≥98%
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀
Stability: ≥1 year at -20°C
Supplied as: A solution in methyl acetate
UV/Vis.: λ_{max}: 306 nm ε: 18,000



This 15-deoxy- $\Delta^{12,14}$ -prostaglandin J₂ (15-deoxy- $\Delta^{12,14}$ -PGJ₂) Quant-PAK contains 50 µg of 15-deoxy- $\Delta^{12,14}$ -PGJ₂-d₄ and 2-4 mg of 15-deoxy- $\Delta^{12,14}$ -PGJ₂ (please see the vial for exact amount and concentration). For long term storage, we suggest that 15-deoxy- $\Delta^{12,14}$ -PGJ₂ and 15-deoxy- $\Delta^{12,14}$ -PGJ₂-d₄ be stored as supplied at -20°C. They will be stable for at least one year.

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 75, 20, and 100 mg/ml, respectively.

15-deoxy- $\Delta^{12,14}$ -PGJ₂-d₄ 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-d₄ in these solvents is 75, 50, and 100 mg/ml, respectively.

15-deoxy- $\Delta^{12,14}$ -PGJ₂-d₄ contains four deuterium atoms at the 3, 3', 4, and 4' positions. It is intended for use as an internal standard for the quantification of 15-deoxy- $\Delta^{12,14}$ -PGJ₂ by GC- or LC-mass spectrometry. The accuracy of the sample weight in the 15-deoxy- $\Delta^{12,14}$ -PGJ₂-d₄ vial is between 5% over and 2% under the weight indicated on the vial. For better precision we have provided a precisely weighed unlabeled 15-deoxy- $\Delta^{12,14}$ -PGJ₂-d₄ with the precise weight (2-4 mg) indicated on the vial. Using this vial the deuterated standard can be quantified by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

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 of 2 µM 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 µM.¹

References

1. Kliewer, S.A., Lenhard, J.M., Willson, T.M., *et al.* *Cell* **83**, 813-819 (1995).
2. Forman, B.M., Tontonoz, P., Chen, J., *et al.* *Cell* **83**, 803-812 (1995).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10006850

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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 after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. 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

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery.**

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

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.

For further details, please refer to our **Warranty and Limitation of Remedy** located on our website and in our catalog.

Copyright Cayman Chemical Company, 06/09/2014

Cayman Chemical

Mailing address
1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone
(800) 364-9897
(734) 971-3335

Fax
(734) 971-3640

E-Mail
custserv@caymanchem.com

Web
www.caymanchem.com