PRODUCT INFORMATION

15-deoxy-Δ^{12,14}-Prostaglandin J₂ MaxSpec® Standard
Item No. 10007235

CAS Registry No.: 87893-55-8
Formal Name: 11-oxo-prosta-5Z,9,12E,14Z-tetraenoic acid
Synonym: 15-deoxy-Δ^{12,14}-PGJ₂
MF: C_{20}H_{28}O_{3}
FW: 316.4
Purity: ≥95%
Supplied as: A solution in methyl acetate; in a deactivated glass ampule
Concentration: 100 µg/ml (nominal); see certificate of analysis for verified concentration
Storage: -20°C
Stability: ≥2 years; Stability testing is ongoing to ensure concentration accuracy. The certificate of analysis and product expiry date will be updated upon completion of testing.
Special Conditions: Store upright and unopened at -20°C. Warm to room temperature prior to opening. Light sensitive.

Description

15-deoxy-Δ^{12,14}-Prostaglandin J₂ (15-deoxy-Δ^{12,14}-PGJ₂) is formed from PGD₂ (Item Nos. 12010 | 10007202) by the elimination of two molecules of water. It binds selectively to PPARγ with an EC₅₀ value of 2 µM in a murine chimera system. 1,2 15-deoxy-Δ^{12,14}-PGJ₂ is more potent than PGD₂, Δ^{12}-PGJ₂ (Item Nos. 18550 | 10007234), and PGJ₂ (Item Nos. 18500 | 10007233) in stimulating lipogenesis in C3H10T1/2 cells. The EC₅₀ value for induction of adipocyte differentiation in cultured fibroblasts is 7 µM.¹

15-deoxy-Δ^{12,14}-PGJ₂ MaxSpec® standard is a quantitative grade standard of 15-deoxy-Δ^{12,14}-PGJ₂ (Item No. 18570) that has been prepared specifically for mass spectrometry or any application where quantitative reproducibility is required. The solution has been prepared gravimetrically and is supplied in a deactivated glass ampule sealed under argon. The concentration was verified by comparison to an independently prepared calibration standard. This 15-deoxy-Δ^{12,14}-PGJ₂ MaxSpec® standard is guaranteed to meet identity, purity, stability, and concentration specifications and is provided with a batch-specific certificate of analysis. Ongoing stability testing is performed to ensure the concentration remains accurate throughout the shelf life of the product. Note: The amount of solution added to the vial is in excess of the listed amount. Therefore, it is necessary to accurately measure volumes for preparation of calibration standards. Follow recommended storage and handling conditions to maintain product quality.

References