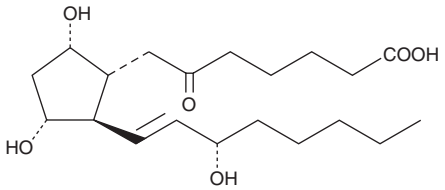
PRODUCT INFORMATION

6-keto Prostaglandin $F_{1\alpha}$ MaxSpec® Standard

Item No. 10007219



CAS Registry No.: 58962-34-8
Formal Name: 6-oxo-9α,11α,15S-trihydroxy-prost-13E-en-1-oic acid
Synonym: 6-keto $PGF_{1\alpha}$
MF: $C_{20}H_{34}O_6$
FW: 370.5
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: ≥3 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

6-keto Prostaglandin $F_{1\alpha}$ (6-keto $PGF_{1\alpha}$) is the inactive, non-enzymatic hydrolysis product of PGI_2 (Item No. 18220).[1,2] 6-keto $PGF_{1\alpha}$ serves as a useful marker of PGI_2 biosynthesis *in vivo*.[3] When [^{3}H]-PGI_2 is injected into healthy human males, 6.6% of the radioactivity is recovered from urine as [^{3}H]-6-keto $PGF_{1\alpha}$.[3]

6-keto $PGF_{1\alpha}$ MaxSpec® standard is a quantitative grade standard of 6-keto $PGF_{1\alpha}$ (Item No. 15210) 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 6-keto $PGF_{1\alpha}$ 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

1. Pace-Asciak, C.R. Isolation, structure, and biosynthesis of 6-ketoprostaglandin $F_{1\alpha}$ in the rat stomach. *J. Am. Chem. Soc.* **98(8)**, 2348-2349 (1976).
2. Johnson, R.A., Morton, D.R., Kinner, J.H., *et al.* The chemical structure of prostaglandin X (prostacyclin). *Prostaglandins* **12(6)**, 915-928 (1976).
3. Brash, A.R., Jackson, E.K., Saggese, C.A., *et al.* Metabolic disposition of prostacyclin in humans. *J. Pharmacol. Exp. Ther.* **226(1)**, 78-87 (1983).

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