

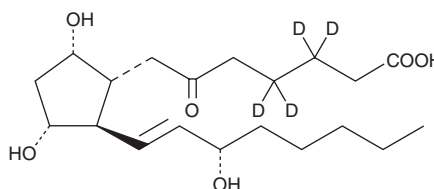
PRODUCT INFORMATION



6-keto Prostaglandin F_{1α}-d₄

Item No. 315210

CAS Registry No.: 82414-64-0
Formal Name: 6-oxo-9α,11α,15S-trihydroxy-prost-13E-en-1-oic-3,3,4,4-d₄ acid
Synonym: 6-keto PGF_{1α}-d₄
MF: C₂₀H₃₀D₄O₆
FW: 374.5
Chemical Purity: ≥95% (6-keto Prostaglandin F_{1α})
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀
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

6-keto Prostaglandin F_{1α}-d₄ (6-keto PGF_{1α}-d₄) is intended for use as an internal standard for the quantification of 6-keto PGF_{1α} (Item No. 15210) 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).

6-keto PGF_{1α}-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 6-keto PGF_{1α}-d₄ in these solvents is approximately 16, 50, and 100 mg/ml, respectively.

Description

6-keto PGF_{1α} is the inactive, non-enzymatic hydrolysis product of PGI₂.^{1,2} 6-keto PGF_{1α} serves as a useful marker of PGI₂ biosynthesis *in vivo*.³ When [³H]-PGI₂ is injected into healthy human males, 6.6% of the radioactivity is recovered from urine as [³H]-6-keto PGF_{1α}.³

References

1. Pace-Asciak, C.R. Isolation, structure, and biosynthesis of 6-ketoprostaglandin F_{1α} in the rat stomach. *J. Am. Chem. Soc.* **98**, 2348-2349 (1976).
2. Johnson, R.A., Morton, D.R., Kinner, J.H., *et al.* The chemical structure of prostaglandin X (prostacyclin). *Prostaglandins* **12**, 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**, 78-87 (1983).

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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