

PRODUCT INFORMATION

2,3-dinor-6-keto Prostaglandin F_{1α}-d₉ (sodium salt)

Item No. 9000462

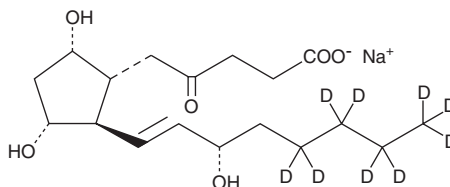
Formal Name: 6-oxo-9α,11α,15S-trihydroxy-2,3-dinor-prost-13E-en-1-oic 15,15,16,16,17,17,18,18,18-d₉ acid, monosodium salt

Synonym: 2,3-dinor-6-keto PGF_{1α}-d₉ (sodium salt)

MF: C₁₈H₂₀D₉O₆ • Na

FW: 373.5

Chemical Purity: ≥95% (2,3-dinor-6-keto Prostaglandin F_{1α} (sodium salt))



Deuterium Incorporation: ≥99% deuterated forms (d₁-d₉); ≤1% d₀

Supplied as: A lyophilized powder

Storage: -20°C

Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

2,3-dinor-6-keto Prostaglandin F_{1α}-d₉ (2,3-dinor-6-keto PGF_{1α}-d₉) (sodium salt) is intended for use as an internal standard for the quantification of 2,3-dinor-6-keto PGF_{1α} (sodium salt) 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).

2,3-dinor-6-keto PGF_{1α}-d₉ (sodium salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the 2,3-dinor-6-keto PGF_{1α}-d₉ (sodium salt) in the solvent of choice, which should be purged with an inert gas. 2,3-dinor-6-keto PGF_{1α}-d₉ (sodium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 2,3-dinor-6-keto PGF_{1α}-d₉ (sodium salt) in ethanol is approximately 1 mg/ml and approximately 10 mg/ml in DMSO and DMF.

Description

2,3-dinor-6-keto PGF_{1α} is the β-oxidation product of 6-keto PGF_{1α} and the major urinary metabolite of PGI₂ in humans.^{1,2} 2,3-dinor-6-keto PGF_{1α} makes up 23% of the recovered radioactivity in urine after administration of labeled 6-keto PGF_{1α} and 20.5% after administration of labeled PGI₂.² In healthy human subjects, the average excreted 2,3-dinor-6-keto PGF_{1α} level is ~100 pg/mg creatinine.³

References

1. Fitzgerald, G.A., Lawson, J., Blair, I.A., *et al.* Analysis of urinary metabolites of thromboxane and prostacyclin by negative-ion chemical-ionization gas chromatography/mass spectrometry. *Adv. Prostaglandin Thromboxane Leukot. Res.* **15**, 87-90 (1985).
2. Rosenkranz, B., Fischer, C., Reimann, I., *et al.* Identification of the major metabolite of prostacyclin and 6-ketoprostaglandin F_{1α} in man. *Biochim. Biophys. Acta* **619(2)**, 207-213 (1980).
3. Wennmalm, Å., Benthin, G., Granström, E.F., *et al.* 2,3-Dinor metabolites of thromboxane A₂ and prostacyclin in urine from healthy human subjects: Diurnal variation and relation to 24h excretion. *Clin. Sci. (Lond.)* **83(4)**, 461-465 (1992).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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