PRODUCT INFORMATION



13,14-dihydro-15-keto Prostaglandin $F_{1\alpha}$

Item No. 15670

CAS Registry No.:	29044-75-5
Formal Name:	9α,11α-dihydroxy-15-oxo-prostan-1-oic acid
Synonym:	13,14-dihydro-15-keto PGF ₁ COOH
MF:	$C_{20}H_{36}O_5$
FW:	356.5
Purity:	≥95% HO [*]
Supplied as:	A solution in methyl acetate Ö
Storage:	-20°C
Stability:	≥2 years
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.	

Laboratory Procedures

13,14-dihydro-15-keto Prostaglandin $F_{1\alpha}$ (13,14-dihydro-15-keto $\mathsf{PGF}_{1\alpha}$) 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 13,14-dihydro-15-keto $\mathsf{PGF}_{1\alpha}$ in these solvents is approximately 50 mg/ml. 13,14-dihydro-15-keto $\mathsf{PGF}_{1\alpha}$ is stable for at least six months in these solvents if stored at -20°C.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of 13,14-dihydro-15-keto $PGF_{1\alpha}$ is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 13,14-dihydro-15-keto $PGF_{1\alpha}$ in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

13,14-dihydro-15-keto $\mathsf{PGF}_{1\alpha}$ is a metabolite of $\mathsf{PGF}_{1\alpha}$ that has been reported in the rat stomach.¹ The measurement of 13,14-dihydro-15-keto $\mathsf{PGF}_{1\alpha}$ can be used as a marker of the in vivo production of $\mathsf{PGF}_{1\alpha}$.²

References

- Pace-Asciak, C.R., Morawska, K., and Wolfe, L.S. Metabolism of prostaglandin F_{1α} by the rat stomach. Biochim. Biophys. Acta 218, 288-295 (1970).
- Sors, H., Maclouf, J., Pradelles, P., et al. The use of iodinated tracers for a sensitive radioimmunoassay of 13,14-dihydro-15-keto prostaglandin F_a. Biochim. Biophys. Acta 486, 553-564 (1977).

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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1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM