

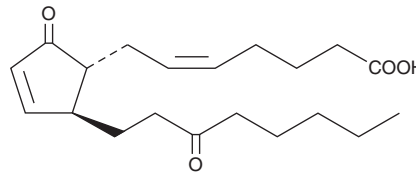
PRODUCT INFORMATION



13,14-dihydro-15-keto Prostaglandin A₂

Item No. 10260

CAS Registry No.: 74872-89-2
Formal Name: 9,15-dioxo-prosta-5Z,10-dien-1-oic acid
Synonym: 13,14-dihydro-15-keto PGA₂
MF: C₂₀H₃₀O₄
FW: 334.5
Purity: ≥98%
UV/Vis.: λ_{max}: 216 nm
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

13,14-dihydro-15-keto Prostaglandin A₂ (13,14-dihydro-15-keto PGA₂) 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 PGA₂ in these solvents is approximately 100, 50, and 75 mg/ml, respectively.

13,14-dihydro-15-keto PGA₂ is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 13,14-dihydro-15-keto PGA₂ should be diluted with the aqueous buffer of choice. The solubility of 13,14-dihydro-15-keto PGA₂ in PBS (pH 7.2) is approximately 2.4 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PGE₂ is metabolized rapidly to 13,14-dihydro-15-keto PGE₂, which is present in the plasma of humans and other mammals. 13,14-dihydro-15-keto PGA₂ results from the non-enzymatic dehydration of 13,14-dihydro-15-keto PGE₂, a process which is accelerated by the presence of albumin.^{1,2} Further decomposition of 13,14-dihydro-15-keto PGA₂ by the intentional addition of base produces bicyclo PGE₂, a stable marker of PGE₂ biosynthesis.²

References

1. Granström, E., Hamberg, M., Hansson, G., *et al.* Chemical instability of 15-keto-13,14-dihydro-PGE₂: The reason for low assay reliability. *Prostaglandins* **19(6)**, 933-945 (1980).
2. Fitzpatrick, F.A., Aguirre, R., Pike, J.E., *et al.* The stability of 13,14-dihydro-15 keto-PGE₂. *Prostaglandins* **19(6)**, 917-931 (1980).

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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