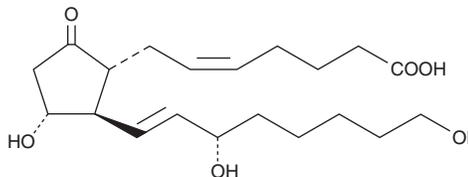


PRODUCT INFORMATION



20-hydroxy Prostaglandin E₂ Item No. 14950

CAS Registry No.: 57930-95-7
Formal Name: 9-oxo-11 α ,15S,20-trihydroxy-prosta-5Z,13E-dien-1-oic acid
Synonym: 20-hydroxy PGE₂
MF: C₂₀H₃₂O₆
FW: 368.5
Purity: \geq 95%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: \geq 1 year



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

Laboratory Procedures

20-hydroxy Prostaglandin E₂ (20-hydroxy PGE₂) is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of 20-hydroxy PGE₂ in these solvents is approximately 100 mg/ml.

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 20-hydroxy PGE₂ is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 20-hydroxy PGE₂ in PBS (pH 7.2) is approximately 5.0 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

20-hydroxy PGE₂ is a product of cytochrome P450 metabolism of PGE₂ (Item No. 14010).^{1,2} ω -Oxidation at C-20 followed by β -oxidation and the loss of up to four carbons from the lower side chain is a prominent metabolic pathway for PGE₂. 20-hydroxy PGE₂ is the putative first intermediate in this chain of chemical transformations.

References

1. Oliw, E.H. Observations on the substrate specificity of prostaglandin hydroxylases of monkey seminal vesicles and sheep vesicular glands. *Biochim. Biophys. Acta* **1001**, 107-110 (1989).
2. Oliw, E.H., Fahlstadius, P., and Hamberg, M. Isolation and biosynthesis of 20-hydroxyprostaglandins E₁ and E₂ in ram seminal fluid. *J. Biol. Chem.* **261**, 9216-9221 (1986).

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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