

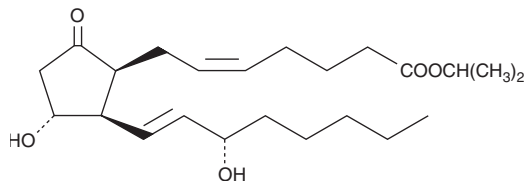
Product Information



8-*iso* Prostaglandin E₂ isopropyl ester

Catalog No. 14352

CAS Registry No.: 330589-21-4
Formal Name: 9-oxo-11.alpha.,15S-dihydroxy-(8.beta.)-prosta-5Z,13E-dien-1-oic acid, isopropyl ester
MF: C₂₃H₃₈O₅
FW: 394.6
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A solution in ethanol



Laboratory Procedures

8-*iso* Prostaglandin E₂ isopropyl ester (8-*iso* PGE₂ isopropyl ester) is a more stable form of the free acid, 8-*iso* PGE₂. For long term storage, we suggest that 8-*iso* PGE₂ isopropyl ester be stored as supplied at -20°C. It will be stable for at least one year.

8-*iso* PGE₂ isopropyl ester 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 8-*iso* PGE₂ isopropyl ester in dimethyl formamide and DMSO is approximately 30 and 50 mg/ml, respectively. 8-*iso* PGE₂ isopropyl ester 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 (note that the 8-*iso* PGE₂ isopropyl ester is considerably less soluble in aqueous solutions than the parent carboxylic acid). Ensure that the residual amount of organic solvent is insignificant since organic solvents may have physiological effects at low concentrations. Store aqueous solutions of 8-*iso* PGE₂ isopropyl ester on ice and use within 12 hours of preparation.

8-*iso* PGE₂ is potent vasoconstrictor in the rat.¹ At μM concentrations, 8-*iso* PGE₂ also inhibits platelet aggregation.² Although no comparable data is available on the isopropyl ester of 8-*iso* PGE₂, it is expected to be similar to the carboxylic acid.

References

1. Morrow, J.D., Minton, T.A., Mukundan, C.R., *et al.* Free radical-induced generation of isoprostanes *in vivo*. *J. Biol. Chem.* **269**, 4317-4326 (1994).
2. Longmire, A.W., Roberts, L.J., and Morrow, J.D. Actions of the E₂-isoprostane, 8-*iso*-PGE₂, on the platelet thromboxane/endoperoxide receptor in humans and rats: Additional evidence for the existence of a unique isoprostane receptor. *Prostaglandins* **48**, 247-256 (1994).

Related Products

8-*iso* Prostaglandin E₂ - Cat. No. 14350

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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