

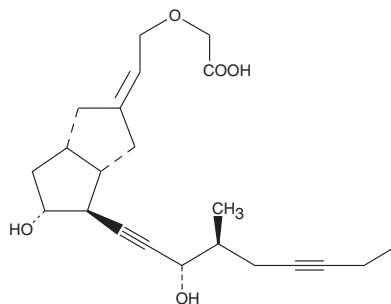
Product Information



Cicaprost

Item No. 16831

CAS Registry No.: 94079-80-8
Formal Name: 2-[2-[(2E,3aS,4S,5R,6aS)-hexahydro-5-hydroxy-4-[(3S,4S)-3-hydroxy-4-methyl-1,6-nonadiyn-1-yl]-2(1H)-pentalenyldene]ethoxy]-acetic acid
Synonym: ZK 96480
MF: C₂₂H₃₀O₅
FW: 374.5
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A solution in methyl acetate



Laboratory Procedures

For long term storage, we suggest that cicaprost be stored as supplied at -20°C. It should be stable for at least one year.

Cicaprost 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 (DMF) purged with an inert gas can be used. The solubility of cicaprost in these solvents is approximately 25 mg/ml in DMSO and approximately 30 mg/ml in ethanol and DMF.

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 cicaprost is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of cicaprost in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Prostaglandin I₂ (PGI₂, prostacyclin) is the most potent endogenous vasodilator that affects both the systemic and pulmonary circulation.¹ Cicaprost is a PGI₂ analog that is orally active with prolonged availability *in vivo*, having a terminal half life in plasma of one hour.^{2,3} In addition to their effects on smooth muscle, PGI₂ analogs, including cicaprost, have been shown to inhibit the pro-inflammatory actions of certain leukocytes, suppress cardiac fibrosis, and block mitogenesis of certain cell types.⁴⁻⁶ Importantly, cicaprost has been shown to strongly reduce lung and lymph node metastasis in rats, suggesting that it might be useful in cancer therapy.⁷

References

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Related Products

15(R)-Iloprost - Item No. 10043 • 16(R)-Iloprost - Item No. 13076 • 16(S)-Iloprost - Item No. 13077 • Carbaprostacyclin - Item No. 18210 • Iloprost - Item No. 18215 • Prostaglandin I₂ (sodium salt) - Item No. 18220 • Beraprost (sodium salt) - Item No. 18230 • 5-*cis*-15(R)-Iloprost - Item No. 10008588 • 15-keto Iloprost - Item No. 10008616

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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

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