PRODUCT INFORMATION



Cicaprost

Item No. 16831

CAS Registry No.: 94079-80-8

Formal Name: 2-[2-[(2E,3aS,4S,5R,6aS)-hexahydro-

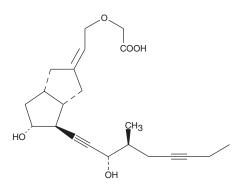
> 5-hydroxy-4-[(3S,4S)-3-hydroxy-4methyl-1,6-nonadiyn-1-yl]-2(1H)pentalenylidenelethoxyl-acetic acid

Synonym: ZK 96480 MF: $C_{22}H_{30}O_5$ FW: 374.5 **Purity:** ≥98%

Supplied as: A solution in methyl acetate

Storage: -20°C Stability: ≥1 year

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



Laboratory Procedures

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 ethanol and DMF is approximately 30 mg/ml and approximately 25 mg/ml in DMSO.

Cicaprost is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of cicaprost should be diluted with the aqueous buffer of choice. 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.

Description

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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- 3. Hildebrand, M., Staks, T., and Nieuweboer, B. Eur. J. Clin. Pharmacol. 39(2), 149-153 (1990).
- 4. Zhou, W., Hashimoto, K., Goleniewska, K., et al. J. Immunol. 178(2), 702-710 (2007).
- 5. Chan, E.C., Dusting, G.J., Guo, N., et al. J. Mol. Cell. Cardiol. 49(2), 176-185 (2010).
- Castagnino, P., Kothapalli, D., Hawthorne, E.A., et al. Prostaglandins Other Lipid Mediat. 93(1-2), 20-24
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WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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