**Product Information**

**Limaprost**  
*Item No. 13810*

CAS Registry No.: 74397-12-9  
Formal Name: 11α,15S-dihydroxy-17S,20-dimethyl-9-oxo-prosta-2E,13E-dien-1-oic acid  
Synonym: 17α,20-dimethyl-Δ2-PGE1, 17α,20-dimethyl-Δ2-Prostaglandin E1  
MF: C22H36O5  
FW: 380.5  
Purity: ≥98%  
Stability: ≥1 year at -20°C  
Supplied as: A crystalline solid

**Laboratory Procedures**

For long term storage, we suggest that limaprost be stored as supplied at -20°C. It will be stable for at least one year. Limaprost is supplied as a crystalline solid. A stock solution may be made by dissolving the limaprost in an organic solvent. Limaprost is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of limaprost in these solvents is approximately 50, 130, and 30 mg/ml, respectively.

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. Organic solvent-free aqueous solutions of limaprost can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of limaprost in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Limaprost is an analog of PGE1 with structural modifications intended to give it a prolonged half-life and greater potency. Limaprost is orally active in both rats and guinea pigs at doses of 100 µg/Kg as an inhibitor of ADP and collagen induced platelet aggregation. Limaprost is 10-1,000 times more potent than PGE1 as an inhibitor of platelet adhesiveness measured in vitro. Intra coronary injection (100 ng/Kg) or intravenous injection (3 µg/Kg) in anesthetized dogs causes vasodilation and increased coronary blood flow by 60-80%. Significant hypotensive effects were seen at 100 and 300 µg/Kg orally in rats.¹

**Reference**


**Related Products**

For a list of related products please visit: [www.caymanchem.com/catalog/13810](http://www.caymanchem.com/catalog/13810)

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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**

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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