

# PRODUCT INFORMATION

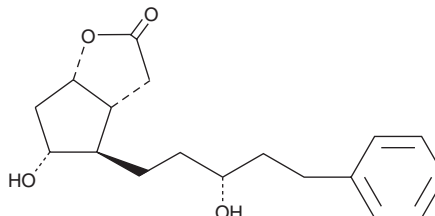


## Latanoprost Lactone Diol

Item No. 70039

**CAS Registry No.:** 145667-75-0  
**Formal Name:** (3aR,4R,5R,6aS)-hexahydro-5-hydroxy-4-[(3R)-3-hydroxy-5-phenylpentyl]-2H-cyclopenta[b]furan-2-one

**MF:** C<sub>18</sub>H<sub>24</sub>O<sub>4</sub>  
**FW:** 304.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 208 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

Latanoprost lactone diol is supplied as a crystalline solid. A stock solution may be made by dissolving the latanoprost lactone diol in the solvent of choice, which should be purged with an inert gas. Latanoprost lactone diol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of latanoprost lactone diol in ethanol is approximately 30 mg/ml and approximately 20 mg/ml in DMSO 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. Organic solvent-free aqueous solutions of latanoprost lactone diol can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of latanoprost lactone diol in PBS (pH 7.2) is approximately 0.3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Latanoprost is an F-series prostaglandin analog which has been approved for use as an ocular hypotensive drug. Latanoprost lactone diol is an intermediate in the synthesis of latanoprost. Latanoprost lactone diol can be converted to the free acid of latanoprost by reduction with DIBAL followed by Wittig reaction with commercially available reagents.

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM