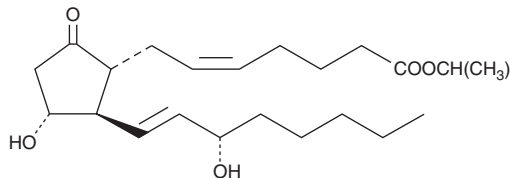


# PRODUCT INFORMATION



## Prostaglandin E<sub>2</sub> isopropyl ester Item No. 10384

**CAS Registry No.:** 71845-66-4  
**Formal Name:** 9-oxo-11 $\alpha$ ,15S-dihydroxy-prosta-5Z,13E-dien-1-oic acid, isopropyl ester  
**Synonym:** PGE<sub>2</sub> isopropyl ester  
**MF:** C<sub>23</sub>H<sub>38</sub>O<sub>5</sub>  
**FW:** 394.5  
**Purity:**  $\geq$ 98%  
**Stability:**  $\geq$ 1 year at -20°C  
**Formulation:** A solution in methyl acetate



### Laboratory Procedures

For long term storage, we suggest that prostaglandin E<sub>2</sub> isopropyl ester (PGE<sub>2</sub> isopropyl ester) be stored as supplied at -20°C. It should be stable for at least one year.

PGE<sub>2</sub> isopropyl ester 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 PGE<sub>2</sub> isopropyl ester in these solvents is approximately 50 mg/ml in ethanol and DMSO and approximately 30 mg/ml in 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 PGE<sub>2</sub> isopropyl ester is needed, it can be prepared by evaporating the methyl ester and directly dissolving the neat oil in aqueous buffers. The solubility of PGE<sub>2</sub> isopropyl ester in PBS, pH 7.2, is approximately 50  $\mu$ g/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

PGE<sub>2</sub> isopropyl ester is a more lipophilic form of the free acid PGE<sub>2</sub>. PG esters have enhanced lipid solubility compared to their parent compounds. They are generally hydrolyzed to the free acid by endogenous esterases upon *in vivo* administration, making the esters useful prodrugs. In general, the C-1 esters of PGs show greatly diminished receptor activity *in vitro* compared to the parent free acids.

#### 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.

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