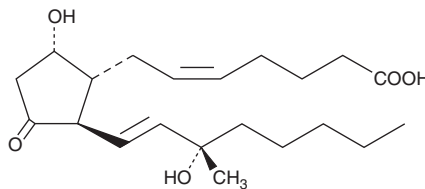


# PRODUCT INFORMATION



## 15(S)-15-methyl Prostaglandin D<sub>2</sub> Item No. 12730

**CAS Registry No.:** 85280-90-6  
**Formal Name:** 9 $\alpha$ ,15S-dihydroxy-11-oxo-15-methyl-prosta-5Z,13E-dien-1-oic acid  
**Synonym:** 15(S)-15-methyl PGD<sub>2</sub>  
**MF:** C<sub>21</sub>H<sub>34</sub>O<sub>5</sub>  
**FW:** 366.5  
**Purity:**  $\geq$ 95%  
**Stability:**  $\geq$ 1 year at -20°C  
**Supplied as:** A solution in methyl acetate



### Laboratory Procedures

For long term storage, we suggest that 15(S)-15-methyl prostaglandin D<sub>2</sub> (15(S)-15-methyl PGD<sub>2</sub>) be stored as supplied at -20°C. It should be stable for one year.

15(S)-15-methyl PGD<sub>2</sub> 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 purged with an inert gas can be used. The solubility of 15(S)-15-methyl PGD<sub>2</sub> in these solvents is approximately 50 mg/ml. 15(S)-15-methyl PGD<sub>2</sub> is stable for at least six months in these solvents if stored at -20°C.

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 15(S)-15-methyl PGD<sub>2</sub> is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 15(S)-15-methyl PGD<sub>2</sub> in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

15(S)-15-methyl PGD<sub>2</sub> is a metabolically stable synthetic analog of PGD<sub>2</sub> (Item No. 12010). In contrast to PGD<sub>2</sub>, 15(S)-15-methyl PGD<sub>2</sub> induces vasoconstriction and increases systemic blood pressure with much reduced inhibitory activity on ADP-induced platelet aggregation.<sup>1</sup> It also exhibits strong antifertility activity in hamsters (200-fold more potent than PGD<sub>2</sub>).<sup>1</sup>

### Reference

1. Bundy, G.L., Morton, D.R., Peterson, D.C., *et al.* Synthesis and platelet aggregation inhibiting activity of prostaglandin D analogues. *J. Med. Chem.* **26**, 790-799 (1983).

#### 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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