**PRODUCT INFORMATION**

**13,14-dihydro-15-keto Prostaglandin D₂**

*Item No. 12610*

**CAS Registry No.:** 59894-07-4  
**Formal Name:** 9α-hydroxy-11,15-dioxo-prost-5Z-en-1-oic acid  
**Synonym:** 13,14-dihydro-15-keto PGD₂  
**MF:** C₂₀H₃₂O₅  
**FW:** 352.5  
**Purity:** ≥95%  
**Stability:** ≥1 year at -80°C  
**Supplied as:** A solution in methyl acetate

---

**Laboratory Procedures**

For long term storage, we suggest that 13,14-dihydro-15-keto prostaglandin D₂ (13,14-dihydro-15-keto PGD₂) be stored as supplied at -80°C. It should be stable for at least one year.

13,14-dihydro-15-keto PGD₂ 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, or dimethyl formamide purged with an inert gas can be used. The solubility of 13,14-dihydro-15-keto PGD₂ in these solvents is approximately 30 mg/ml.

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 aqueous solution of 13,14-dihydro-15-keto PGD₂ is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 13,14-dihydro-15-keto PGD₂ in PBS (pH 7.2) is approximately 2.5 mg/ml. Store aqueous solutions of 13,14-dihydro-15-keto PGD₂ on ice and use within 12 hours of preparation.

---

**Description**

13,14-dihydro-15-keto PGD₂ is a metabolite of PGD₂ (Item No. 12010) which is formed through the 15-hydroxy PGDH pathway. 13,14-dihydro-15-keto PGD₂ was recently identified as a selective agonist for the CRTH2/DP₂ receptor. It also inhibits ion flux in a canine colonic mucosa preparation. In humans, 13,14-dihydro-15-keto PGD₂ is further metabolized to give 11β-hydroxy compounds which have also undergone β-oxidation of one or both side chains. Virtually no 13,14-dihydro-15-keto PGD₂ survives intact in the urine.

---

**References**