# PRODUCT INFORMATION



## Prostaglandin H<sub>2</sub>

Item No. 17020

CAS Registry No.: 42935-17-1

Formal Name: 9a,11a-epidioxy-15S-hydroxy-

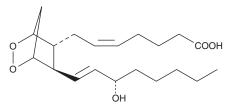
prosta-5Z,13E-dien-1-oic acid

Synonym: MF:  $C_{20}H_{32}O_5$ FW: 352.5 **Purity:** ≥95%

Supplied as: A solution in acetone

Storage: -80°C Stability: ≥6 months

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



### **Laboratory Procedures**

Prostaglandin H<sub>2</sub> (PGH<sub>2</sub>) is a very unstable compound and therefore, stock solutions should be kept on ice, at all times, while performing experiments in the lab.  $PGH_2$  is supplied as a solution in acetone. To change the solvent, first place the vial of PGH2 on ice. Next, evaporate the acetone under a gentle stream of nitrogen and immediately add the solvent of choice. PGH2 is soluble in the organic solvent ethanol at a concentration of approximately 100 mg/ml.

PGH<sub>2</sub> is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the acetonic solution of PGH2 should be diluted with the aqueous buffer of choice. The solubility of PGH2 in PBS (pH 7.2) is approximately 2 mg/ml. Store aqueous solutions of PGH<sub>2</sub> on ice and use immediately as the half-life of PGH<sub>2</sub> in aqueous solutions is approximately 10 minutes.

#### Description

PGH<sub>2</sub> was first isolated from incubations of arachidonic acid with ovine seminal vesicle microsomes, and was described as a potent vasoconstrictor. PGH<sub>2</sub> is the precursor for all 2-series PGs and thromboxanes (TXs), and is a TP receptor agonist which irreversibly aggregates human platelets at 50-100 ng/ml.<sup>2</sup>

### References

- 1. Hamberg, M., Svensson, J., Wakabayashi, T., et al. Isolation and structure of two prostaglandin endoperoxides that cause platelet aggregation. Proc. Natl. Acad. Sci. USA 71(2), 345-349 (1974).
- Samuelsson, B., Goldyne, M., Granström, E., et al. Prostaglandins and thromboxanes. Annu. Rev. Biochem. **47**, 997-1029 (1978).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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