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Product Information

Prostaglandin G₁

Product Number **P 7617**
Storage Temperature $-70\text{ }^{\circ}\text{C}$

CAS# 52162-11-5
Synonyms: PGG₁; 15-Hydroperoxyprostaglandin R1

Product Description

Formula: C₂₀H₃₄O₆
Formula weight: 370.5

Prostaglandins are a family of fatty acid derivatives possessing a variety of potent biological activities, which are hormonal or regulatory in nature.¹ Prostaglandin G₁ (PGG₁) is used in studying prostacyclin synthetase, an enzyme in the arachidonic acid cascade. Prostacyclin synthetase possesses a high sensitivity to time-dependent destruction by the oxidant released during the peroxidase-catalyzed reduction of PGG₁.²

Reagent

The product is supplied in an acetone solution.

Precautions and Disclaimer

This product is for laboratory research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Solutions may be prepared in aqueous buffer (PBS) by evaporating the acetone using a stream of nitrogen with the product cooled on ice. The new solvent should be added immediately. Prostaglandin G₁ is soluble in PBS to at least 2 mg/ml. Aqueous solutions of PGG₁ are stable for no more than 10 minutes and should be prepared immediately prior to use.

Storage/Stability

Store at $-70\text{ }^{\circ}\text{C}$. The product as supplied is stable at least two years when stored properly.

References

1. Biochemistry, Second Ed., Lehninger, A.L., ed., Worth Publishers, (New York, NY: 1978) p. 300.
2. Ham, E.A., et al., Peroxidase-dependent deactivation of prostacyclin synthetase. J. Biol. Chem., **254**, 2191-2194 (1979).

PMH/MAM 9/02

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