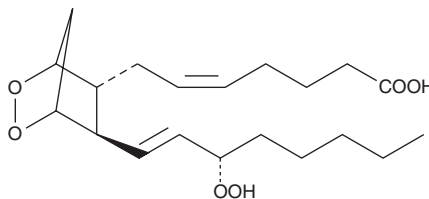


PRODUCT INFORMATION



Prostaglandin G₂ Item No. 17010

CAS Registry No.: 51982-36-6
Formal Name: 9 α ,11 α -epidioxy-15S-hydroperoxy-prosta-5Z,13E-dien-1-oic acid
Synonym: PGG₂
MF: C₂₀H₃₂O₆
FW: 368.5
Purity: \geq 95%
Supplied as: A solution in acetone
Storage: -80°C
Stability: \geq 6 months



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

Laboratory Procedures

Prostaglandin G₂ (PGG₂) is supplied as a solution in acetone. To change the solvent, simply evaporate the acetone under a gentle stream of nitrogen and immediately add the solvent of choice. PGG₂ is soluble in the organic solvent ethanol at a concentration of approximately 100 mg/ml.

PGG₂ is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the acetonic solution of PGG₂ should be diluted with the aqueous buffer of choice. The solubility of PGG₂ in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PGG₂ is the first intermediate in the COX pathway which is stable enough to be isolated and characterized.¹ It is the C-15 hydroperoxide of PGH₂. Under normal conditions, PGG₂ is quickly metabolized by the peroxidase activity intrinsic to both COX-1 and -2 to give PGH₂, which serves as the key precursor to the 2-series PGs and thromboxanes.^{1,2}

References

1. Hamberg, M., Svensson, J., and Samuelsson, B. Prostaglandin endoperoxides. A new concept concerning the mode of action and release of prostaglandins. *Proc. Natl. Acad. Sci. USA* **71(10)**, 3824-3828 (1974).
2. Kulmacz, R.J. Prostaglandin G₂ levels during reaction of prostaglandin H synthase with arachidonic acid. *Prostaglandins* **34(2)**, 225-240 (1987).

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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