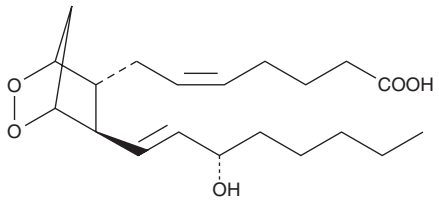
PRODUCT INFORMATION

Prostaglandin H_2

Item No. 17020

CAS Registry No.:	42935-17-1
Formal Name:	9α,11α-epidioxy-15S-hydroxy-prosta-5Z,13E-dien-1-oic acid
Synonym:	PGH_2
MF:	$C_{20}H_{32}O_5$
FW:	352.5
Purity:	≥95%
Supplied as:	A 100 µg/ml solution in acetone
Storage:	-80°C
Stability:	≥2 years



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

Laboratory Procedures

Prostaglandin H_2 (PGH_2) 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 PGH_2 on ice. Next, evaporate the acetone under a gentle stream of nitrogen and immediately add the solvent of choice. PGH_2 is soluble in the organic solvent ethanol at a concentration of approximately 100 mg/ml.

PGH_2 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the acetonic solution of PGH_2 should be diluted with the aqueous buffer of choice. The solubility of PGH_2 in PBS (pH 7.2) is approximately 2 mg/ml. Store aqueous solutions of PGH_2 on ice and use immediately as the half-life of PGH_2 in aqueous solutions is approximately 10 minutes.

Description

PGH_2 was first isolated from incubations of arachidonic acid with ovine seminal vesicle microsomes, and was described as a potent vasoconstrictor.[1] PGH_2 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.[2]

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).
2. 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.

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.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 07/21/2025

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM