

PRODUCT INFORMATION



9,11-methane-epoxy Prostaglandin F_{1α}

Item No. 10007850

CAS Registry No.: 72517-81-8

Formal Name: [1α,4α,5β,6α(1E,3S*)]-6-(3-hydroxy-1-octenyl)-2-oxabicyclo[2.2.1]heptane-5-heptanoic acid

Synonyms: 9,11-epoxymethano PGH₁,
9,11-methane-epoxy PGF_{1α}

MF: C₂₁H₃₆O₄

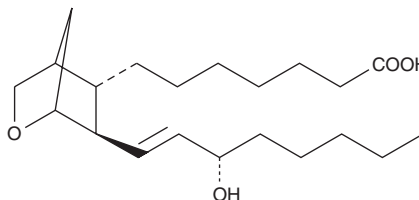
FW: 352.5

Purity: ≥96%

Supplied as: A 1 mg/ml solution in methyl acetate

Storage: -20°C

Stability: ≥1 year



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

Laboratory Procedures

9,11-methane-epoxy Prostaglandin F_{1α} (9,11-methane-epoxy PGF_{1α}) 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, and dimethyl formamide purged with an inert gas can be used. The solubility of 9,11-methane-epoxy PGF_{1α} in these solvents is approximately 10 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 solution of 9,11-methane-epoxy PGF_{1α} is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 9,11-methane-epoxy PGF_{1α} in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

9,11-methane-epoxy Prostaglandin F_{1α} (PGF_{1α}) is a derivative of prostaglandin H₁ (PGH₁; Item No. 17015).¹ It induces aggregation of isolated rabbit platelets (EC₅₀ = 0.88 μM) and contraction of rabbit aortic strips (EC₅₀ = 0.11 μM). 9,11-methane-epoxy PGF_{1α} induces contraction of isolated guinea pig tracheas (EC₅₀ = 3.4 μM).

Reference

1. Morita, A., Nishino, H., Hasegawa, K., *et al.* Biological activities of prostaglandin H₁ analogs. *Prostaglandins* **18**(4), 529-540 (1979).

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, 01/08/2026

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