

PRODUCT INFORMATION



U-44069

Item No. 16440

CAS Registry No.: 56985-32-1

Formal Name: 9,11-dideoxy-9 α ,11 α -epoxymethano-prosta-5Z,13E-dien-1-oic acid

Synonyms: 9,11-dideoxy-9 α ,11 α -epoxymethano PGF_{2 α '}
9,11-dideoxy-9 α ,11 α -epoxymethano Prostaglandin F_{2 α '}
9,11-epoxymethano Prostaglandin H₂

MF: C₂₁H₃₄O₄

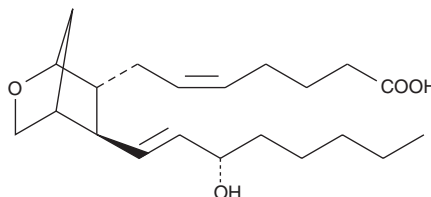
FW: 350.5

Purity: \geq 98%

Supplied as: A solution in methyl acetate

Storage: -20°C

Stability: \geq 2 years



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

Laboratory Procedures

U-44069 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 U-44069 in these solvents is approximately 100 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 U-44069 is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of U-44069 in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

U-44069 is a stable analog of the endoperoxide PGH₂ (Item No. 17020) and a TP receptor agonist. It stimulates shape change in human platelets without a measurable increase in Ca²⁺ with an EC₅₀ value of 1.8 nM.¹ U-44069 has an EC₅₀ value of 3 μ M and 54 nM for platelet aggregation and phosphatidate formation in human platelets, respectively.²

References

1. Simpson, A.W.M., Hallam, T.J., and Rink, T.J. Low concentrations of the stable prostaglandin endoperoxide U44069 stimulate shape change in quin2-loaded platelets without a measurable increase in [Ca²⁺]_i. *FEBS Lett.* **201(2)**, 301-305 (1986).
2. Pollock, W.K., Armstrong, R.A., Brydon, L.J., *et al.* Thromboxane-induced phosphatidate formation in human platelets. Relationship to receptor occupancy and to changes in cytosolic free calcium. *Biochem. J.* **219(3)**, 833-842 (1984).

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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