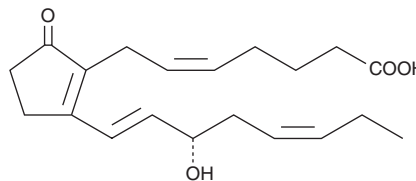


PRODUCT INFORMATION



Prostaglandin B₃ Item No. 11990

CAS Registry No.: 36614-32-1
Formal Name: 9-oxo-15S-hydroxy-prosta-5Z,8(12),13E,17Z-tetraen-1-oic acid
Synonyms: PGB₃
MF: C₂₀H₂₈O₄
FW: 332.4
Purity: ≥97%
UV/Vis.: λ_{max}: 280 nm
Supplied as: A solution in methyl acetate
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Prostaglandin B₃ (PGB₃) 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 can be used. To prevent oxidation of PGB₃, the solvent should be purged with an inert gas. The solubility of PGB₃ in these solvents is approximately 100, 50, and 75 mg/ml, respectively.

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 aqueous solution of PGB₃ is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in basic buffers. The solubility of PGB₃ in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PGB₃ is a non-enzymatic dehydration product resulting from the treatment of PGE₃ with strong base. In a structure-activity binding study to determine the affinity of various PGs to human PPAR_γ, PGB₃ exhibited a K_i value greater than 1 mM.¹ In contrast, PGB₁ and PGB₂ showed significantly higher affinity for PPAR_γ, with K_i values of 26 and 77 μM, respectively, in the same assay.

Reference

1. Ferry, G., Bruneau, V., Beauverger, P., *et al.* Binding of prostaglandins to human PPAR_γ: tool assessment and new natural ligands. *Eur. J. Pharmacol.* **417**, 77-89 (2001).

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, 04/14/2020

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