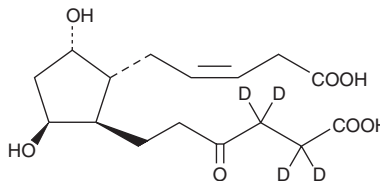


PRODUCT INFORMATION



PGDM-d₄ Item No. 11344

Formal Name: 9 α ,11 β -dihydroxy-15-oxo-13,14-dihydro-2,3,18,19-tetranor-prostan-1,20-dioic acid-18,18',19,19'-d₄
Synonym: Prostaglandin D Metabolite-d₄
MF: C₁₆H₂₀D₄O₇
FW: 332.4
Chemical Purity: \geq 90% (mixture) (PGDM)
Deuterium Incorporation: \geq 99% deuterated forms (d₁-d₄); \leq 1% d₀
Supplied as: A solution in methyl acetate
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

PGDM-d₄ is intended for use as an internal standard for the quantification of PGDM by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

PGDM-d₄ 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 PGDM-d₄ in these solvents is approximately 50 mg/ml.

Description

PGD₂ plays a pharmacological role in allergic and asthmatic anaphylaxis, normal physiological sleep and lowering of body temperature, as well as inhibits platelet aggregation and relaxes vascular smooth muscle.¹ PGDM is a major urinary metabolite of PGD₂ with a unique lower sidechain that readily undergoes reversible cyclization.² It is used as a biomarker to assess endogenous production of PGD₂.

References

1. Giles, H. and Leff, P. The biology and pharmacology of PGD₂. *Prostaglandins* **35**(2), 277-300 (1988).
2. Morrow, J.D., Prakash, C., Awad, J.A., et al. Quantification of the major urinary metabolite of prostaglandin D₂ by a stable isotope dilution mass spectrometric assay. *Anal. Biochem.* **193**(1), 142-148 (1991).

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

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