

PRODUCT INFORMATION



ent-8-iso Prostaglandin F_{2a}-d₉ Item No. 10011721

Formal Name: 9b,11b,15R-trihydroxy-(12a)-prosta-5Z,13E-dien-1-oic-17,17,18,18,19,19,20,20,20-d₉ acid

Synonyms: ent-8-epi PGF_{2a}-d₉, ent-8-iso PGF_{2a}-d₉, ent-15-F_{2t}-Isoprostane-d₉

MF: C₂₀H₂₅D₉O₅

FW: 363.5

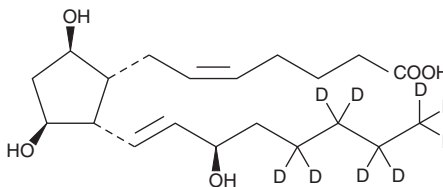
Chemical Purity: ≥98%

Deuterium Incorporation: ≥99% deuterated forms (d₁-d₉); ≤1% d₀

Supplied as: A solution in acetonitrile

Storage: -20°C

Stability: ≥1 year



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

Laboratory Procedures

ent-8-iso Prostaglandin F_{2a}-d₉ (ent-8-iso PGF_{2a}-d₉) is intended for use as an internal standard for the quantification of ent-8-iso PGF_{2a} (Item No. 10011545) 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).

ent-8-iso PGF_{2a}-d₉ is supplied as a solution in acetonitrile. To change the solvent, simply evaporate the acetonitrile 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 ent-8-iso PGF_{2a}-d₉ in these solvents is approximately 100 mg/ml.

Description

Isoprostanes are produced by the non-enzymatic, free-radical peroxidation of arachidonic acid. They have been used as biomarkers of oxidative stress, but they also have been found to have a potent biological activity. ent-8-iso PGF_{2a} is a potent vasoconstrictor of porcine retinal and brain microvessels with EC₅₀ values of 31 and 54 nM, respectively.¹

Reference

1. Hou, X., Robers, L.J.II., Gobeil, F., Jr., et al. Isomer-specific contractile effects of a series of synthetic F₂-isoprostanes on retinal and cerebral microvasculature. *Free Radic. Biol. Med.* **36(2)**, 163-172 (2004).

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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