Prostaglandin A₂-biotin
Item No. 10010499

Formal Name: 9-oxo-15S-hydroxy-prosta-
5Z,10,13E-trien-1-oyl-N'-
biotinoyl-1,5-diaminopentane

Synonym: PGA₂-biotin
MF: C₃₅H₅₆N₄O₅S
FW: 644.9

Purity: ≥95%
Supplied as: A solution in ethanol

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 A₂-biotin (PGA₂-biotin) is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. The solvent DMSO purged with an inert gas can be used. The solubility of PGA₂-biotin in DMSO is approximately 10 mg/ml.

Description

PGA₂ blocks cell cycle progression of NIH 3T3 cells at the G₁ and G₂/M phase.¹ It has antitumor effects, targeting scaffold/matrix attachment region-binding protein 1 (SMAR1) through an Hsp70-dependent mechanism.²⁻⁴ PGA₂ also induces apoptosis in HL-60 cells.⁵ PGA₂-biotin is an affinity probe which allows PGA₂ to be detected through an interaction with the biotin ligand.⁶ Biotinylated eicosanoids have been used to capture proteins which interact with the lipid.⁶

References