

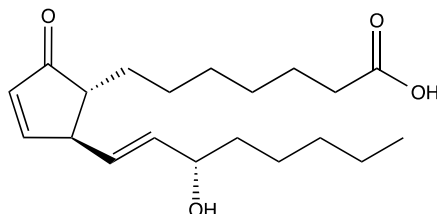
Catalog # 10-4461

Prostaglandin A₁

CAS# 14152-28-4

PGA₁; 15(S)-9-Oxo-15-hydroxyprosta-10,13E-dien-1-oic acid

Lot # FBM2139



PGA₁ is a naturally occurring prostaglandin with diverse biological actions including anti-hypertensive^{1,2}, anti-inflammatory^{3,4}, anti-viral^{5,6}, and anticancer^{7,8}.

- 1) Lee *et al.* (1972) *Renal effects of prostaglandin A1 in patients with essential hypertension*; *Kidney Int.* **1** 254
- 2) Topozada *et al.* (1988) *Treatment of preeclampsia with prostaglandin A1*; *Am.J.Obstet.Gynecol.* **159** 160
- 3) Rossi *et al.* (2000) *Anti-inflammatory cyclopentenone prostaglandins are direct inhibitors of IκappaB kinase*; *Nature* **403** 103
- 4) Mandal *et al.* (2005), *Yin-yang: balancing act of prostaglandins with opposing functions to regulate inflammation*; *J.Immunol.* **175** 6271
- 5) Carta *et al.* (2014) *Prostaglandin A1 inhibits avian influenza virus replication at a postentry level: Effect on virus protein synthesis and NF-κB activity*; *Prostaglandins Leukot.Essential Fatty Acids* **91** 311
- 6) Tsukimoto *et al.* (2015) *A new role for PGA1 in inhibiting hepatitis C virus-IRES-mediated translation by targeting viral translation factors*; *Antiviral Res.* **117** 1
- 7) Diez-Dacal *et al.* (2011) *Identification of aldo-keto reductase AKR1B10 as a selective target for modification and inhibition by prostaglandin A(1): implications for antitumoral activity*; *Cancer Res.* **71** 4161
- 8) Anta *et al.* (2016), *PGA1-induced apoptosis involves specific activation of H-Ras and N-Ras in cellular endomembranes*; *Cell Death Dis.* **7** e2311

PHYSICAL DATA

Molecular Weight:	336.47
Molecular Formula:	C ₂₀ H ₃₂ O ₄
Purity:	99% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml) and ethanol (>25 mg/mL)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

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