

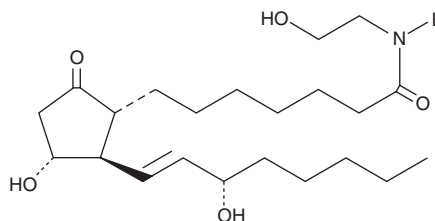
PRODUCT INFORMATION



Prostaglandin E₁ Ethanolamide

Item No. 13012

CAS Registry No.: 210976-81-1
Formal Name: 11 α ,15S-dihydroxy-N-(2-hydroxyethyl)-9-oxo-prost-13E-en-1-amide
Synonyms: Alprostadil Ethanolamide, PGE₁-EA
MF: C₂₂H₃₉NO₅
FW: 397.6
Purity: \geq 98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

Prostaglandin E₁ ethanolamide (PGE₁-EA) is supplied as a crystalline solid. A stock solution may be made by dissolving the PGE₁-EA in the solvent of choice, which should be purged with an inert gas. PGE₁-EA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of PGE₁-EA in ethanol is approximately 50 mg/ml and approximately 30 mg/ml in DMSO and DMF.

PGE₁-EA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PGE₁-EA should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. PGE₁-EA has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. The solubility of PGE₁-EA in isotonic saline is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PGE₁-EA is the ethanolamine-amide analog of PGE₁. Conversion of AEA, the ethanolamide of arachidonic acid, to PGE₂-EA has been demonstrated *in vitro*.^{1,2} It is not established whether this conversion occurs in whole animals, nor has the pharmacology of the resultant prostaglandin ethanolamides been rigorously studied.

References

1. Yu, M., Ives, D., and Ramesha, C.S. Synthesis of prostaglandin E₂ ethanolamide from anandamide by cyclooxygenase-2. *J. Biol. Chem.* **272**(34), 21181-21186 (1997).
2. Kozak, K.R., Crews, B.C., Morrow, J.D., *et al.* Metabolism of the endocannabinoids, 2-arachidonylglycerol and anandamide, into prostaglandin, thromboxane, and prostacyclin glycerol esters and ethanolamides. *J. Biol. Chem.* **277**(47), 44877-44885 (2002).

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.

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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