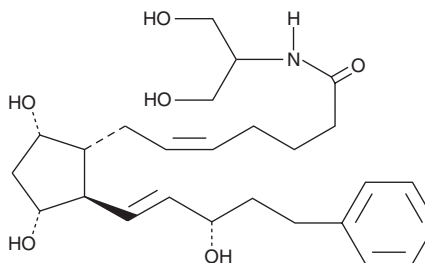


PRODUCT INFORMATION

17-phenyl trinor Prostaglandin F_{2α} serinol amide

Item No. 10004237

CAS Registry No.: 1175838-84-2
Formal Name: (5Z)-7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(1E,3S)-3-hydroxy-5-phenyl-1-penten-1-yl]cyclopentyl]-N-[2-hydroxy-1-(hydroxymethyl)ethyl]-5-heptenamide
Synonyms: Bimatoprost serinol amide, 17-phenyl trinor PGF_{2α}-SA
MF: C₂₆H₃₉NO₆
FW: 461.6
Purity: ≥98%
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

17-phenyl trinor Prostaglandin F_{2α} serinol amide (17-phenyl trinor PGF_{2α}-SA) 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. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of 17-phenyl trinor PGF_{2α}-SA in these solvents is approximately 10 mg/ml.

17-phenyl trinor PGF_{2α}-SA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 17-phenyl trinor PGF_{2α}-SA should be diluted with the aqueous buffer of choice. The solubility of 17-phenyl trinor PGF_{2α}-SA in PBS (pH 7.2) is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

2-Arachidonyl glycerol (2-AG) exhibits cannabinoid agonist activity at the central cannabinoid (CB₁) receptor, is an important endogenous monoglyceride species, and is thus considered to be the natural ligand for the CB₁ receptor.^{1,2} 2-AG can also be metabolized by COX-2 to form prostaglandin (PG) 2-glycerol esters.³ These 2-glycerol esters rapidly equilibrate to form 90:10 mixtures favoring the more stable 1-glycerol ester. 17-phenyl trinor PGF_{2α}-SA is a stable analog of PGF_{2α} 2-glycerol ester incorporating an activity-enhancing 17-phenyl substitution. The biological activity of 17-phenyl trinor PGF_{2α}-SA has not yet been determined.

References

1. Sugiura, T., Kodaka, T., Kondo, S., *et al.* Is the cannabinoid CB₁ receptor a 2-arachidonoylglycerol receptor? Structural requirements for triggering a Ca²⁺ transient in NG108-15 cells. *J. Biochem.* **122**(4), 890-895 (1997).
2. Kondo, S., Kondo, H., Nakane, S., *et al.* 2-Arachidonoylglycerol, an endogenous cannabinoid receptor agonist: Identification as one of the major species of monoacylglycerols in various rat tissues, and evidence for its generation through Ca²⁺-dependent and -independent mechanisms. *FEBS Lett.* **429**(2), 152-156 (1998).
3. Kozak, K.R., Crews, B.C., Morrow, J.D., *et al.* Metabolism of the endocannabinoids, 2-arachidonoylglycerol 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