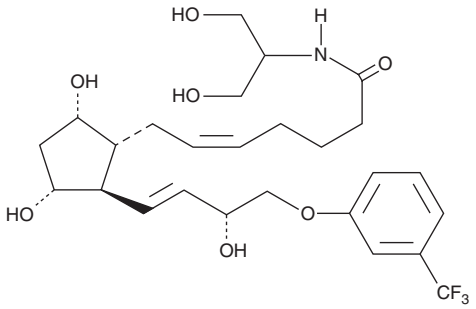
PRODUCT INFORMATION

Fluprostenol serinol amide

Item No. 10004236

CAS Registry No.:	1176658-85-7
Formal Name:	N-[(2-hydroxy-1-hydroxymethyl) ethyl]-9α,11α,15R-trihydroxy-16-(3-trifluoromethyl)phenoxy)-17,18,19,20-tetranor-prosta-5Z,13E-dien-1-amide
Synonym:	Flu-SA
MF:	$C_{26}H_{36}F_3NO_7$
FW:	531.6
Purity:	≥98%
UV/Vis.:	λ_{max}: 222, 277 nm
Supplied as:	A solution in ethanol
Storage:	-20°C
Stability:	≥1 year



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

Laboratory Procedures

Fluprostenol serinol amide 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 fluprostenol serinol amide in these solvents is approximately 20 and 30 mg/ml, respectively.

Fluprostenol serinol amide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of fluprostenol serinol amide should be diluted with the aqueous buffer of choice. The solubility of fluprostenol serinol amide in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

2-arachidonyl glycerol (2-AG) exhibits cannabinoid (CB) agonist activity at the CB_1 receptor,[1] is an important endogenous monoglyceride species,[2] and is thus considered to be the natural ligand for the CB_1 receptor. 2-AG can also be metabolized by cyclooxygenase-2 and specific prostaglandin H_2 (PGH_2) isomerases to form PG 2-glyceryl esters.[3] Fluprostenol serinol amide (Flu-SA) is a stable analog of $PGF_{2\alpha}$ 2-glyceryl ester that has much greater stability. The biological activity of Flu-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 Ca^{2+} 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 Ca^{2+}-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-arachidonylgycerol and anandamide, into prostaglandin, thromboxane, and prostacyclin glycerol esters and ethanolamides. *J. Biol. Chem.* **277(47)**, 44877-44885 (2002).

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