# **PRODUCT** INFORMATION



## 1a,1b-dihomo Prostaglandin F<sub>2a</sub>

Item No. 16050

CAS Registry No.: Formal Name:	57944-39-5 1a,1b-dihomo-9α,11α,15S-trihydroxy-	он
	prosta-5Z,13E-dien-1-amide	
Synonym:	1a,1b-dihomo PGF <sub>2a</sub>	Соон
MF:	C <sub>22</sub> H <sub>38</sub> O <sub>5</sub>	
FW:	382.5	но
Purity:	≥98%	ОН
Storage:	-20°C	011
Stability:	≥2 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

#### Laboratory Procedures

1a,1b-dihomo  $PGF_{2a}$  is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 1a,1b-dihomo  $PGF_{2a}$  in these solvents is approximately 100 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of 1a,1b-dihomo PGF<sub>2a</sub> is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 1a,1b-dihomo PGF<sub>2a</sub> in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

1a,1b-dihomo  $PGF_{2\alpha}$  is the theoretical product of adrenic acid in the COX pathway.<sup>1,2</sup> 1a,1b-dihomo  $PGF_{2\alpha}$  is primarily produced in renal medulla where adrenic acid is selectively distributed.<sup>2</sup>

#### References

- 1. Ferretti, A. and Flanagan, V.P. Mass spectrometric evidence for the conversion of exogenous adrenate to dihomo-prostaglandins by seminal vesicle cyclo-oxygenase. A comparative study of two animal species. J. Chromatogr. 383, 241-250 (1986).
- 2. Sprecher, H., VanRollins, M., Sun, F., et al. Dihomo-prostaglandins and -thromboxane. A prostaglandin family from adrenic acid that may be preferentially synthesized in the kidney. J. Biol. Chem. 257, 3912-3918 (1982).

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.

#### WARRANTY AND LIMITATION OF REMEDY

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