

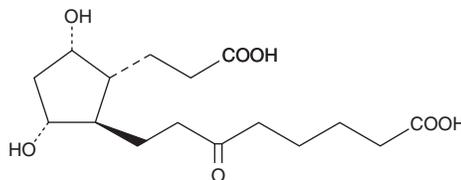
# Product Information



## tetranor-PGFM

Catalog No. 16840

**CAS Registry No.:** 23109-94-6  
**Formal Name:** 9 $\alpha$ ,11 $\alpha$ -dihydroxy-15-oxo-13,14-dihydro-2,3,4,5-tetranor-prostan-1,20-dioic acid  
**Synonym:** tetranor-Prostaglandin F Metabolite  
**MF:** C<sub>16</sub>H<sub>26</sub>O<sub>7</sub>  
**FW:** 330.4  
**Purity:**  $\geq$ 98%  
**Stability:**  $\geq$ 6 months at -80°C  
**Supplied as:** A solution in methyl acetate



### Laboratory Procedures

For long term storage, we suggest that tetranor-PGFM be stored as supplied at -80°C. It should be stable for at least six months.

tetranor-PGFM 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 tetranor-PGFM 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 tetranor-PGFM is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of tetranor-PGFM in PBS (pH 7.2) is approximately 10 mg/ml. Store aqueous solutions of tetranor-PGFM on ice and use within 12 hours of preparation. Although solutions of tetranor-PGFM may be stable for more than 12 hours, we recommend making a fresh preparation each day.

tetranor-PGFM is the major urinary metabolite of PGF<sub>2 $\alpha$</sub> .<sup>1-4</sup> Normal healthy females excrete 7-13  $\mu$ g of tetranor-PGFM per day compared to 11-59  $\mu$ g for healthy males.<sup>2</sup> In pregnant females, tetranor-PGFM levels in the urine are 2 to 5-fold higher and diminish to pre-pregnancy levels soon after labor.<sup>2</sup>

### References

1. Granström, E. and Samuelsson, B. The structure of a urinary metabolite of prostaglandin F<sub>2 $\alpha$</sub>  in man. *J. Am. Chem. Soc.* **91**, 3398-3400 (1969).
2. Granström, E. and Samuelsson, B. On the metabolism of prostaglandin F<sub>2 $\alpha$</sub>  in female subjects. *J. Biol. Chem.* **246**, 5254-5263 (1971).
3. Hamberg, M. Quantitative studies on prostaglandin synthesis in man III. Excretion of the major urinary metabolite of prostaglandins F<sub>1 $\alpha$</sub>  and F<sub>2 $\alpha$</sub>  during pregnancy. *Life Sci.* **14**, 247-252 (1974).
4. Hamberg, M. Quantitative studies on prostaglandin synthesis in man II. Determination of the major urinary metabolite of prostaglandins F<sub>1 $\alpha$</sub>  and F<sub>2 $\alpha$</sub> . *Anal. Biochem.* **55**, 368-378 (1973).

### Related Products

tetranor-PGDM - Cat. No. 12850 • Prostaglandin F<sub>2 $\alpha$</sub>  - Cat. No. 16010 • 13,14-dihydro-15-keto Prostaglandin F<sub>2 $\alpha$</sub>  - Cat. No. 16670 • tetranor-PGFM Lipid Maps MS Standard - Cat. No. 10007228

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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