

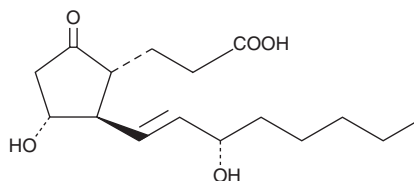
# PRODUCT INFORMATION



## tetranor-Prostaglandin E<sub>1</sub>

Item No. 26702

**CAS Registry No.:** 23923-84-4  
**Formal Name:** (1R,2R,3R)-3-hydroxy-2-[(1E,3S)-3-hydroxy-1-octen-1-yl]-5-oxo-cyclopentanepropanoic acid  
**Synonyms:** 7 $\alpha$ ,11-Dihydroxy-5-ketotetranorprost-9-enoic Acid, Tetranor PGE<sub>1</sub>, Tetranorprostaglandin E<sub>1</sub>  
**MF:** C<sub>16</sub>H<sub>26</sub>O<sub>5</sub>  
**FW:** 298.4  
**Purity:** ≥95%  
**Supplied as:** A solution in methyl acetate  
**Storage:** -20°C  
**Stability:** ≥1 year



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

### Laboratory Procedures

tetranor-Prostaglandin E<sub>1</sub> 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-prostaglandin E<sub>1</sub> 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-prostaglandin E<sub>1</sub> is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of tetranor-prostaglandin E<sub>1</sub> in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

tetranor-Prostaglandin E<sub>1</sub> (tetranor-PGE<sub>1</sub>) is metabolite of PGE<sub>1</sub> (Item No. 13010) and PGE<sub>2</sub> (Item No. 14010) that is formed by  $\beta$ -oxidation.<sup>1,2</sup>

### References

1. Oates, J.A., Sweetman, B.J., Gréene, K., *et al.* Identification and assay of tetranor-prostaglandin E<sub>1</sub> in human urine. *Anal. Biochem.* **74**(2), 546-559 (1976).
2. Kimbrough, J.R., Jana, S., Kim, K., *et al.* Synthesis of tetranor-PGE<sub>1</sub>: A urinary metabolite of prostaglandins E<sub>1</sub> and E<sub>2</sub>. *Tetrahedron Lett.* **61**(22), 151922 (2020).

#### 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 08/31/2022

#### 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