

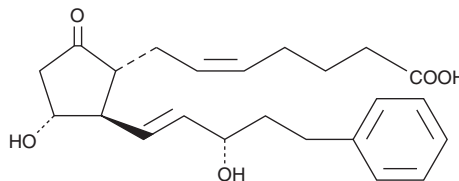
# PRODUCT INFORMATION



## 17-phenyl trinor Prostaglandin E<sub>2</sub>

Item No. 14810

**CAS Registry No.:** 38315-43-4  
**Formal Name:** (5Z)-7-[(1R,2R,3R)-3-hydroxy-2-[(1E,3S)-3-hydroxy-5-phenyl-1-penten-1-yl]-5-oxocyclopentyl]-5-heptenoic acid  
**Synonym:** 17-phenyl trinor PGE<sub>2</sub>  
**MF:** C<sub>23</sub>H<sub>30</sub>O<sub>5</sub>  
**FW:** 386.5  
**Purity:** ≥98%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

17-phenyl trinor Prostaglandin E<sub>2</sub> (17-phenyl trinor PGE<sub>2</sub>) is supplied as a crystalline solid. A stock solution may be made by dissolving the 17-phenyl trinor PGE<sub>2</sub> in the solvent of choice, which should be purged with an inert gas. 17-phenyl trinor PGE<sub>2</sub> is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 17-phenyl trinor PGE<sub>2</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. Organic solvent-free aqueous solutions of 17-phenyl trinor PGE<sub>2</sub> can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 17-phenyl trinor PGE<sub>2</sub> in PBS (pH 7.2) is approximately 0.8 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

17-phenyl trinor PGE<sub>2</sub> is a synthetic analog of PGE<sub>2</sub>. It is an EP<sub>1</sub> and EP<sub>3</sub> receptor agonist.<sup>1,2</sup> 17-phenyl trinor PGE<sub>2</sub> causes contraction of the guinea pig ileum at a concentration of 11 μM.<sup>1</sup> It is slightly less potent than PGE<sub>2</sub> in stimulating gerbil colon and rat uterus.<sup>2</sup> With an ED<sub>50</sub> value of 350 μg/kg, 17-phenyl trinor PGE<sub>2</sub> is 4.4 times more potent than PGE<sub>2</sub> as an antifertility agent in hamsters.<sup>2</sup>

### References

1. Lawrence, R.A., Jones, R.L., and Wilson, N.H. Characterization of receptors involved in the direct and indirect actions of prostaglandins E and I on the guinea-pig ileum. *Br. J. Pharmacol.* **105(2)**, 271-278 (1992).
2. Miller, W.L., Weeks, J.R., Lauderdale, J.W., et al. Biological activities of 17-phenyl-18,19,20-trinorprostaglandins. *Prostaglandins* **9(1)**, 9-18 (1975).

#### 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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