17-phenyl trinor Prostaglandin E₂ ethyl amide

**Item No. 13532**

**CAS Registry No.:** 1219032-20-8

**Formal Name:** N-ethyl-9-oxo-11α,15S-dihydroxy-17-phenyl-18,19,20-trinor-prosta-5Z,13E-dien-1-amide

**Synonym:** 17-phenyl trinor PGE₂ ethyl amide

**MF:** C₂₅H₃₅NO₄

**FW:** 413.6

**Purity:** ≥98%

**Stability:** ≥1 year at -20°C

**Supplied as:** A solution in ethanol

**Laboratory Procedures**

For long term storage, we suggest that 17-phenyl trinor prostaglandin E₂ ethyl amide (17-phenyl trinor PGE₂ ethyl amide) be stored as supplied at -20°C. It should be stable for at least one year.

17-phenyl trinor PGE₂ ethyl 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 17-phenyl trinor PGE₂ ethyl amide 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 17-phenyl trinor PGE₂ ethyl amide is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 17-phenyl trinor PGE₂ ethyl amide in PBS, pH 7.2, is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

17-phenyl trinor PGE₂ ethyl amide is derived from 17-phenyl trinor PGE₂, a synthetic analog of PGE₂ that acts as an agonist of EP₁ and EP₃ receptors in mice (Kᵢ = 14 and 3.7 nM, respectively) and EP₂ and EP₃ receptors in rats (Kᵢ = 25, 4.3, and 54 nM, respectively).1,2 17-phenyl trinor PGE₂ causes contraction of guinea pig ileum at a concentration of 11 µM and is 4.4 times more potent than PGE₂ as an antifertility agent in hamsters.3,4 Modification of the C-1 carboxyl group to an ethyl amide serves to increase lipid solubility, thereby improving uptake into tissues and further lowering the effective concentration. Ethyl amide groups are then removed by amidases, regenerating the active free acid.

**References**


**Related Products**

For a list of related products please visit: [www.caymanchem.com/catalog/13532](http://www.caymanchem.com/catalog/13532)

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**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 Safety Data Sheet, which has been sent to our email at your institution.

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Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals herein. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

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