Prostaglandin E$_2$ p-acetamidophenyl ester

Item No. 14053

**CAS Registry No.:** 57790-52-0

**Formal Name:** 9-oxo-11α,15S-dihydroxyprost-5Z,13E-dien-1-οic acid, (4-acetylamino)phenyl ester

**MF:** C$_{28}$H$_{39}$NO$_6$

**FW:** 485.6

**Purity:** ≥98%

**Stability:** ≥1 year at -20°C

**Supplied as:** A crystalline solid

**Laboratory Procedures**

For long term storage, we suggest that Prostaglandin E$_2$ p-acetamidophenyl ester (PGE$_2$ p-acetamidophenyl ester) be stored as supplied at -20°C. It should be stable for at least one year.

PGE$_2$ p-acetamidophenyl ester is supplied as a crystalline solid. A stock solution may be made by dissolving the PGE$_2$ p-acetamidophenyl ester in an organic solvent. PGE$_2$ p-acetamidophenyl ester is soluble in organic solvents such as ethanol (40 mg/ml), DMSO (35 mg/ml), and dimethyl formamide (38 mg/ml). PGE$_2$ p-acetamidophenyl ester will be stable for at least six months in these solvents if stored at -20°C.

PGE$_2$ p-acetamidophenyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PGE$_2$ p-acetamidophenyl ester should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. PGE$_2$ p-acetamidophenyl ester has a solubility of approximately 50 µg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

PGE$_2$ p-acetamidophenyl ester is a crystalline derivative of PGE$_2$. PGE$_2$ is one of the primary cyclooxygenase products of arachidonic acid and one of the most widely investigated prostaglandins. Its activity influences inflammation, fertility and parturition, gastric mucosal integrity, and immune modulation.$^{1-4}$ The effects of PGE$_2$ are transduced by at least four distinct receptors designated EP$_1$, EP$_2$, EP$_3$, and EP$_4$. Affinity constants (K$_d$) of PGE$_2$ for these receptors range from 1-10 nM depending on the receptor subtype and tissue.

**References**


**Related Products**

For a list of related products please visit: [www.caymanchem.com/catalog/14053](http://www.caymanchem.com/catalog/14053)

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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 via email to your institution.

**WARNING:** This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.

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