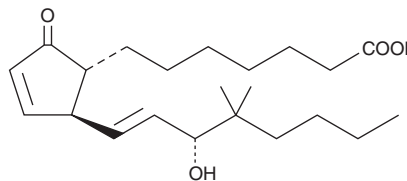


# PRODUCT INFORMATION



## 16,16-dimethyl Prostaglandin A<sub>1</sub> Item No. 10080

**CAS Registry No.:** 41692-24-4  
**Formal Name:** 15R-hydroxy-16,16-dimethyl-9-oxo-prosta-10,13E-dien-1-oic acid  
**Synonym:** 16,16-dimethyl PGA<sub>1</sub>  
**MF:** C<sub>22</sub>H<sub>36</sub>O<sub>4</sub>  
**FW:** 364.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 216 nm  
**Supplied as:** A solution in methyl acetate  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

16,16-dimethyl Prostaglandin A<sub>1</sub> (16,16-dimethyl PGA<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 16,16-dimethyl PGA<sub>1</sub> in these solvents is approximately 100, 50, and 75 mg/ml, respectively.

16,16-dimethyl PGA<sub>1</sub> is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 16,16-dimethyl PGA<sub>1</sub> should be diluted with the aqueous buffer of choice. The solubility of 16,16-dimethyl PGA<sub>1</sub> in PBS (pH 7.2) is approximately 2.4 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

16,16-dimethyl PGA<sub>1</sub> is a metabolism resistant analog of PGA<sub>1</sub>. *In vitro*, it inhibits the viral replication in both HSV and HIV-1 infection systems at concentrations that do not adversely alter cellular DNA synthesis. The ID<sub>50</sub> for HSV-1 strains in Vero cells and human foreskin fibroblasts are 3.8-5.6 µg/ml and 4.6-7.3 µg/ml, respectively. The ID<sub>50</sub> for T cells acutely infected with HIV-1 is 2.5 µg/ml.<sup>1</sup>

### Reference

1. Hughes-Fulford, M., McGrath, M.S., Hanks, D., *et al.* Effects of dimethyl prostaglandin A<sub>1</sub> on herpes simplex virus and human immunodeficiency virus replication. *Antimicrob. Agents Chemother.* **36(10)**, 2253-2258 (1992).

#### 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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