



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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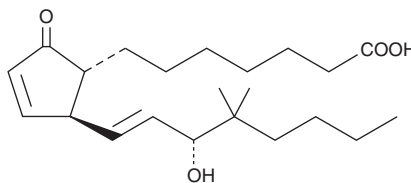
# PRODUCT INFORMATION



## 16,16-dimethyl Prostaglandin A<sub>1</sub>

Item No. 10080

**CAS Registry No.:** 41692-24-4  
**Formal Name:** 9-oxo-15R-hydroxy-16,16-dimethyl-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%  
**Stability:** ≥1 year at -20°C  
**Supplied as:** A solution in methyl acetate  
**UV/Vis.:** λ<sub>max</sub>: 216 nm



### Laboratory Procedures

16,16-dimethyl Prostaglandin A<sub>1</sub> (16,16-dimethyl PGA<sub>1</sub>) is a metabolism resistant analog of PGA<sub>1</sub>. For long term storage, we suggest that 16,16-dimethyl PGA<sub>1</sub> be stored as supplied at -20°C. It should be stable for at least one year.

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 DMSO, dimethyl formamide, or ethanol purged with an inert gas can be used. The solubility of 16,16-dimethyl PGA<sub>1</sub> in these solvents is approximately 50 mg/ml. 16,16-dimethyl PGA<sub>1</sub> is stable for at least six months in these solvents if stored at -20°C

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 solutions of 16,16-dimethyl PGA<sub>1</sub> can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 16,16-dimethyl PGA<sub>1</sub> in PBS (pH 7.2) is approximately 2 mg/ml. Avoid adding 16,16-dimethyl PGA<sub>1</sub> to basic solutions (pH >7.4) as base treatment will convert 16,16-dimethyl PGA<sub>1</sub> into 16,16-dimethyl PGB<sub>1</sub>. 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*, 16,16-dimethyl PGA<sub>1</sub> 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> value 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> value 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**, 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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