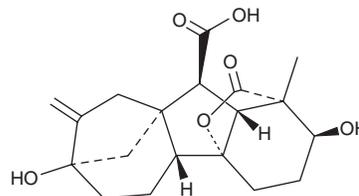


# PRODUCT INFORMATION



## Gibberellin A<sub>1</sub> Item No. 34291

**CAS Registry No.:** 545-97-1  
**Formal Name:** (1 $\alpha$ ,2 $\beta$ ,4 $\alpha$ ,4 $\beta$ ,10 $\beta$ )-2,4a,7-trihydroxy-1-methyl-8-methylene-gibbane-1,10-dicarboxylic acid, 1,4a-lactone  
**Synonym:** GA<sub>1</sub>  
**MF:** C<sub>19</sub>H<sub>24</sub>O<sub>6</sub>  
**FW:** 348.4  
**Purity:**  $\geq$ 90%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years  
**Item Origin:** Synthetic



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

### Laboratory Procedures

Gibberellin A<sub>1</sub> is supplied as a solid. A stock solution may be made by dissolving the gibberellin A<sub>1</sub> in the solvent of choice, which should be purged with an inert gas. Gibberellin A<sub>1</sub> is soluble in methanol, DMSO, and a 1:1 solution of acetone:water. We do not recommend storing the aqueous solution for more than one day.

### Description

Gibberellin A<sub>1</sub> is a plant hormone that has been found in *Phaseolus multiflorus* and has growth stimulatory activities.<sup>1-3</sup> It reverses inhibition of spinach stem elongation induced by the plant growth retardants AMO-1618 or BX-112 (prohexadione; Item No. 33922).<sup>2</sup> Gibberellin A<sub>1</sub> increases hypocotyl, but not radicle, growth of cucumber seedlings when used at concentrations of 30 and 100  $\mu$ M.<sup>3</sup>

### References

1. MacMillan, J., Seaton, J.C., and Suter, P.J. Plant hormones—I: Isolation of gibberellin A<sub>1</sub> and gibberellin A<sub>5</sub> from *Phaseolus multiflorus*. *Tetrahedron* **11(1-2)**, 60-66 (1960).
2. Zeevaart, J.A., Gage, D.A., and Talon, M. Gibberellin A<sub>1</sub> is required for stem elongation in spinach. *Proc. Natl. Acad. Sci. USA* **90(15)**, 7401-7405 (1993).
3. Halevy, A.H. and Cathey, H.M. Effects of structure and concentration of gibberellins on the growth of cucumber seedlings. *Bot. Gaz.* **122(1)**, 63-67 (1960).

**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.

**WARRANTY AND LIMITATION OF REMEDY**  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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