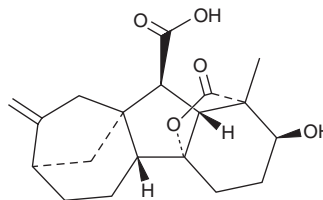


PRODUCT INFORMATION



Gibberellin A₄ Item No. 31400

CAS Registry No.: 468-44-0
Formal Name: (1 α ,2 β ,4 α ,4 β ,10 β)-2,4a-dihydroxy-1-methyl-8-methylene-gibbane-1,10-dicarboxylic acid, 1,4a-lactone
Synonym: GA₄
MF: C₁₉H₂₄O₅
FW: 332.4
Purity: \geq 98% (mixture of isomers)
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years
Item Origin: Plant/Unidentified sp.



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

Laboratory Procedures

Gibberellin A₄ is supplied as a crystalline solid. A stock solution may be made by dissolving the gibberellin A₄ in the solvent of choice, which should be purged with an inert gas. Gibberellin A₄ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of gibberellin A₄ in these solvents is approximately 30 mg/ml.

Description

Gibberellin A₄ is a plant hormone originally isolated from *G. fujikuroi* that has plant signaling and growth stimulatory activities.¹ Gibberellin A₄ is found in the micropylar endothelium cells of *Arabidopsis* maternal seed tissue and triggers suspensor programmed cell death (PCD) in the embryo.² It increases hypocotyl, but not radicle, growth of cucumber seedlings when used at concentrations ranging from 6-100 μ M.³ Gibberellin A₄ also increases flowering in apple trees when applied post-flowering in the previous year.⁴

References

1. Takahashi, N., Seta, Y., Kitamura, H., *et al.* A new gibberellin, gibberellin A₄. *Bull. Agri. Chem. Soc. Japan* **21**(6), 396-398 (1957).
2. Shi, C., Luo, P., Du, Y.-T., *et al.* Maternal control of suspensor programmed cell death via gibberellin signaling. *Nat. Commun.* **10**(1), 3484 (2019).
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).
4. Looney, N.E., Pharis, R.P., and Noma, M. Promotion of flowering in apple trees with gibberellin A₄ and C-3 epi-gibberellin A₄. *Planta* **165**(2), 292-294 (1985).

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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