

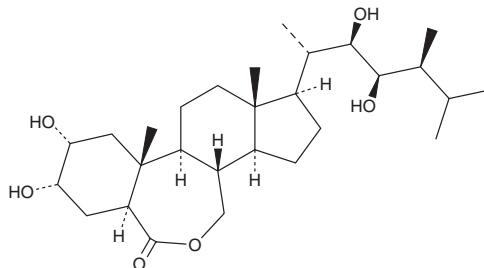
PRODUCT INFORMATION



Brassinolide

Item No. 21594

CAS Registry No.: 72962-43-7
Formal Name: (1R,3aS,3bS,10bS)-1-[(1S,2R,3R,4S)-2,3-dihydroxy-1,4,5-trimethylhexyl]hexadecahydro-8S,9R-dihydroxy-10aR,12aS-dimethyl-6H-benz[c]indeno[5,4-e]oxepin-6aS-one
MF: C₂₈H₄₈O₆
FW: 480.7
Purity: ≥90%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Brassinolide is supplied as a crystalline solid. A stock solution may be made by dissolving the brassinolide in the solvent of choice, which should be purged with an inert gas. Brassinolide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of brassinolide in ethanol and DMSO is approximately 3 mg/ml and approximately 5 mg/ml in DMF.

Brassinolide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, brassinolide should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Brassinolide has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Brassinolide is a biologically active brassinosteroid that has important roles in regulating plant growth and development.^{1,2} It activates plasma membrane-bound brassinosteroid insensitive 1 (Bri1), a leucine-rich repeat receptor-like kinase, which interacts with Bri1-associated receptor kinase 1 (BAK1) to initiate signaling.^{2,3}

References

1. McMorris, T.C. Recent developments in the field of plant steroid hormones. *Lipids* **32**(12), 1303-1308 (1997).
2. Vriet, C.R., Russinova, E., and Reuzeau, C. From squalene to brassinolide: The steroid metabolic and signaling pathways across the plant kingdom. *Mol. Plant* **6**(6), 1738-1757 (2013).
3. Clouse, S.D. Brassinosteroid signal transduction: From receptor kinase activation to transcriptional networks regulating plant development. *Plant Cell* **23**(4), 1219-1230 (2011).

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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