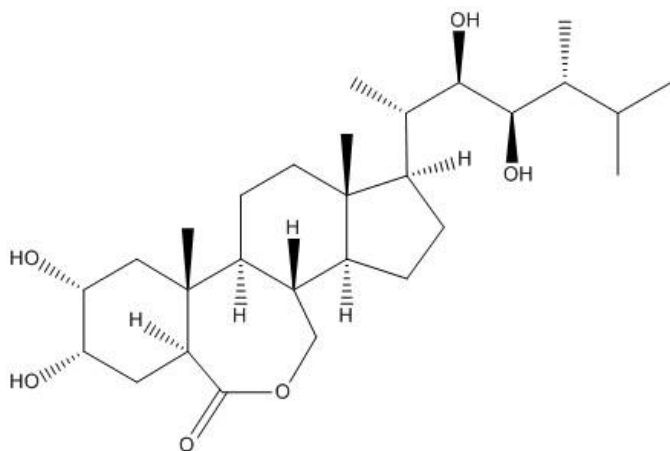


## Product Information Sheet

### E244 24-Epibrassinolide



Synonyms: (22*R/S*,23*R/S*,24*R*)-2 $\alpha$ ,3 $\alpha$ ,22,23-Tetrahydroxy- $\beta$ -homo-7-oxa-5 $\alpha$ -ergostan-6-one

CAS: 78821-43-9

Formula: C<sub>27</sub>H<sub>48</sub>O<sub>6</sub>

Molecular Wt: 480.68

#### Properties

Form: Crystalline Powder

Appearance: White, Fine to Coarse Powder

Purity:  $\geq$ 90%

Application: Plant Growth Regulator

Solubility: DMSO at 1 mg/mL

Typical Working Concentration: N/A

Storage Temp: -20°C

Other Notes: Plant Tissue Culture Tested

This molecule has been shown to increase plant cell elongation. Both gibberillins and brassinosteroids are known to positively regulate this elongation through over expression of *Arabidopsis thaliana* transcription factor *PRE1* (*PACLOBUTRAZOL-RESISTANT1*) (Zhang *et al.* 2009). *PRE1* is also an antagonist of the transcriptional repressor *IBH1* (*ILI1 BINDING BHLH PROTEIN1*) which inhibits this elongation (Ikeda *et al.* 2012). eBL is an active form of brassinosteroids and it also down regulates the expression of *IBH1*.

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## Product Information Sheet

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### References

- Ikeda M., Fujiwara S., Mitsuda N. Ohme-Takagi M. (2012) A triantagonistic basic helix-loop-helix system regulates cell elongation in Arabidopsis. *Plant Cell* Vol. 24 pg. 4483-4497.
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