

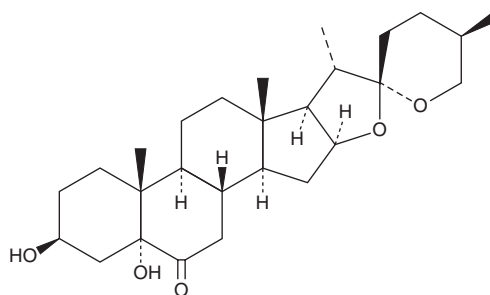
# PRODUCT INFORMATION



## 5 $\alpha$ -hydroxy Laxogenin

Item No. 27665

**CAS Registry No.:** 56786-63-1  
**Formal Name:** (3 $\beta$ ,5 $\alpha$ ,25R)-3,5-dihydroxyspirostan-6-one  
**Synonyms:** Biobras-16, Brassinosteroid BB-16, Brassinosteroid DI-31  
**MF:** C<sub>27</sub>H<sub>42</sub>O<sub>5</sub>  
**FW:** 446.6  
**Purity:**  $\geq$ 95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 2 years



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

### Laboratory Procedures

5 $\alpha$ -hydroxy laxogenin is supplied as a solid. A stock solution may be made by dissolving the 5 $\alpha$ -hydroxy laxogenin in the solvent of choice, which should be purged with an inert gas. 5 $\alpha$ -hydroxy laxogenin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 5 $\alpha$ -hydroxy laxogenin in these solvents is approximately 10 and 15 mg/ml, respectively.

### Description

5 $\alpha$ -hydroxy laxogenin is a brassinosteroid analog and a derivative of diosgenin (Item No. 19847).<sup>1,2</sup> Topical administration of 5 $\alpha$ -hydroxy laxogenin (4, 8, and 12 ppm), in combination with a commercial fertilizer, increases the yield and fresh weight of endives (*C. endivia*).<sup>2</sup> It also inhibits sodium chloride-induced decreases in the fresh weight of lettuce shoots and roots when applied topically at concentrations of 0.1 and 1  $\mu$ M, as well as inhibits increases in ethylene emission at a concentration of 1  $\mu$ M.<sup>3</sup>

### References

1. Pérez-Labrada, K., Brouard, I., Estévez, S., *et al.* New insights into the structure-cytotoxicity relationship of spirostan saponins and related glycosides. *Bioorg. Med. Chem.* **20(8)**, 2690-2700 (2012).
2. Serna, M., Hernández, F., Coll, F., *et al.* Effects of brassinosteroid analogues on total phenols, antioxidant activity, sugars, organic acids and yield of field grown endive (*Cichorium endivia* L.). *J. Sci. Food Agric.* **93(7)**, 1765-1771 (2013).
3. Serna, M., Coll, Y., Zapata, P.J., *et al.* A brassinosteroid analogue prevented the effect of salt stress on ethylene synthesis and polyamines in lettuce plants. *Sci. Hortic. (Amsterdam)* **185**, 105-112 (2015).

#### 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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