

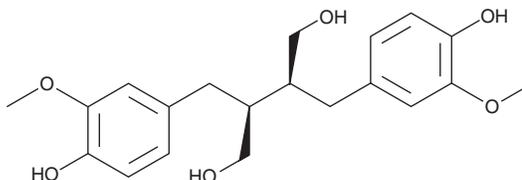
# PRODUCT INFORMATION



## (+)-Secoisolariciresinol

Item No. 33155

**CAS Registry No.:** 145265-02-7  
**Formal Name:** 2S,3S-bis[[4-hydroxy-3-methoxyphenyl)methyl]-1,4-butanediol  
**Synonym:** (+)-SECO  
**MF:** C<sub>20</sub>H<sub>26</sub>O<sub>6</sub>  
**FW:** 362.4  
**Purity:** ≥98%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Plant/*Taxus chinensis*



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

### Laboratory Procedures

(+)-Secoisolariciresinol is supplied as a crystalline solid. A stock solution may be made by dissolving the (+)-secoisolariciresinol in the solvent of choice, which should be purged with an inert gas. (+)-Secoisolariciresinol is soluble in organic solvent DMSO.

### Description

(+)-Secoisolariciresinol ((+)-SECO) is a lignan that has been found in flaxseed and has diverse biological activities.<sup>1-3</sup> It inhibits  $\alpha$ -glucosidase and  $\alpha$ -amylase in a cell-free assay when used at a concentration of 20  $\mu$ M.<sup>1</sup> (+)-SECO (0.3 mM) reduces adiponectin production by, and triglyceride accumulation in, 3T3-L1 adipocytes.<sup>2</sup> It stimulates IgM production in HB4C5 hybridoma cells when used at concentrations ranging from 0.1 to 100  $\mu$ M.<sup>3</sup>

### References

- Hano, C., Renouard, S., Molinié, R., *et al.* Flaxseed (*Linum usitatissimum* L.) extract as well as (+)-secoisolariciresinol diglucoside and its mammalian derivatives are potent inhibitors of  $\alpha$ -amylase activity. *Bioorg. Med. Chem. Lett.* **23(10)**, 3007-3012 (2013).
- Tominaga, S., Sugahara, T., Nishimoto, S., *et al.* The effect of secoisolariciresinol on 3T3-L1 adipocytes and the relationship between molecular structure and activity. *Biosci. Biotechnol. Biochem.* **73(1)**, 35-39 (2009).
- Sugahara, T., Yamauchi, S., Nishimoto, S., *et al.* The structure-activity relationships of flaxseed lignan, secoisolariciresinol. *Interdisciplinary Studies on Environmental Chemistry* 263-268 (2008).

#### 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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