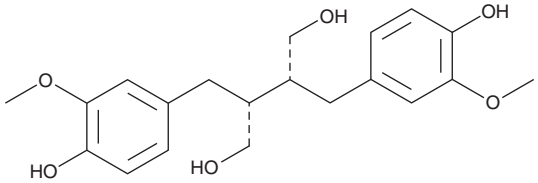
PRODUCT INFORMATION

(–)-Secoisolariciresinol

Item No. 33155

CAS Registry No.:	29388-59-8
Formal Name:	2R,3R-*bis*[(4-hydroxy-3-methoxyphenyl)methyl]-1,4-butanediol
MF:	$C_{20}H_{26}O_6$
FW:	362.4
Purity:	≥98%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 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 at a concentration of approximately 10 mM.

Description

(–)-Secoisolariciresinol is a lignan that has been found in flaxseed and has diverse biological activities.[1-3] It scavenges DPPH (Item No. 14805) radicals (IC_{50} = 13.7 µg/ml in a cell-free assay).[1] (–)-Secoisolariciresinol (0.1-100 µM) stimulates IgM production in HB4C5 hybridoma cells.[2] It induces estrogen receptor-dependent gene expression in a reporter assay, as well as stimulates proliferation of MCF-7 human breast cancer cells, in a concentration-dependent manner. (–)-Secoisolariciresinol (5.8 mg/kg, p.o.) reduces weight gain and serum adiponectin levels in a mouse model of obesity induced by a high-fat diet (HFD).[3]

References

1. Rao, J.M., Tiwari, A.K., Kumar, U.S., *et al.* (-)-Secoisolariciresinol as an antioxidant obtained from a new natural source namely *Stereopermum personatum*. *Council of Scientific and Industrial Research*. **US 6,489,514 B1** (2002).
2. Sugahara, T., Yamauchi, S., Nishimoto, S., *et al.* The structure-activity relationships of flaxseed lignan, secoisolariciresinol. *Interdisciplinary Studies on Environmental Chemistry* 263-268 (2008).
3. Tominaga, S., Nishi, K., Nishimoto, S., *et al.* (–)-Secoisolariciresinol attenuates high-fat diet-induced obesity in C57BL/6 mice. *Food Funct.* **3(1)**, 76-82 (2012).

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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