

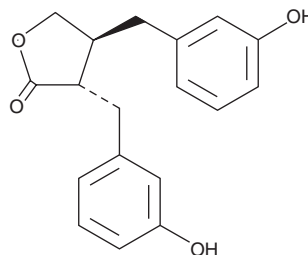
PRODUCT INFORMATION



(±)-Enterolactone

Item No. 10112

CAS Registry No.: 78473-71-9
Formal Name: (±)-dihydro-(3,4)-bis[(3-hydroxyphenyl)methyl]-2(3H)-furanone
Synonym: HPMF
MF: C₁₈H₁₈O₄
FW: 298.3
Purity: ≥95%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

(±)-Enterolactone is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of (±)-enterolactone in these solvents is approximately 30 mg/ml.

(±)-Enterolactone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, evaporate the ethanol under a gentle stream of nitrogen and dilute with ethanol. (±)-Enterolactone has a solubility of approximately 100 µg/ml in a 1:5 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Diets high in fiber contain plant lignan species that may be directly responsible for some observed health benefits of these diets.¹ Enterolactone is an enterobacterial breakdown product of plant lignans that is absorbed and can be measured in human serum. Enterolactone and other lignans and phytoestrogens have been associated with a reduced risk of acute coronary events, hormone-dependent cancers, and possibly osteoporosis. Recent observations have shown an inverse association between serum enterolactone levels and serum isoprostane levels.² This association implies a protective effect against oxidative injury associated with the dietary lignans themselves, enterolactone, or some intermediate in this pathway.

References

1. Morton, L.W., Caccetta, R.A.-A., Puddey, I.B., *et al.* Chemistry and biological effects of dietary phenolic compounds: relevance to cardiovascular disease. *Clin. Exp. Pharmacol. Physiol.* **27(3)**, 152-159 (2000).
2. Vanharanta, M., Voutilainen, S., Nurmi, T., *et al.* Association between low serum enterolactone and increased plasma F₂-isoprostanes, a measure of lipid peroxidation. *Atherosclerosis* **160(2)**, 465-469 (2002).

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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