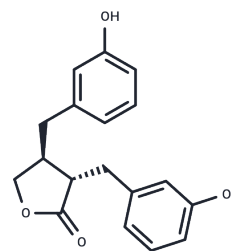


## Enterolactone

## Chemical Properties

CAS No. :	78473-71-9
Formula:	C <sub>18</sub> H <sub>18</sub> O <sub>4</sub>
Molecular Weight:	298.33
Storage:	Store at low temperature Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



## Biological Description

Description	Enterolactone (trans- $\alpha,\beta$ -Bis(3-hydroxybenzyl)butyrolactone) is a bioactive phenolic metabolite with estrogenic properties and anti-breast cancer activity. It strongly inhibits cancer cell proliferation and migration by upregulating THBS1, synergistically suppressing epithelial ovarian cancer.
Targets(IC50)	Apoptosis,Endogenous Metabolite
In vitro	Enterolactone (150 $\mu$ M, 48h) combined with Trabe significantly inhibited the proliferation and migration of human EOC cells. [1] Enterolactone (25-75 $\mu$ M,48h) blocks the growth of MDA-MB-231 breast cancer cells in the "S" phase. Enterolactone (25-75 $\mu$ M,15 h) triggers apoptosis of MDA-MB-231 breast cancer cells through caspase-3 activation. [2]
In vivo	The expression of THBS1 gene in Enterolactone (1 mg/kg, intraperitoneal injection) treatment group was significantly up-regulated. [1]

## Solubility Information

Solubility	DMSO: 20 mg/mL (67.04 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	3.352 mL	16.760 mL	33.5199 mL
5 mM	0.6704 mL	3.352 mL	6.704 mL
10 mM	0.3352 mL	1.676 mL	3.352 mL
50 mM	0.067 mL	0.3352 mL	0.6704 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Zeng Z, et al. Enterolactone and trabectedin suppress epithelial ovarian cancer synergistically via upregulating THBSPhytother Res. 2023 Oct;37(10):4722-4739.

Bigdeli B, et al. Enterolactone: A novel radiosensitizer for human breast cancer cell lines through impaired DNA repair and increased apoptosis. Toxicol Appl Pharmacol. 2016 Dec 15;313:180-194.

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