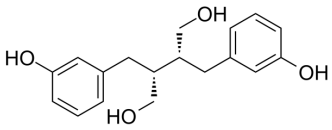
Enterodiol

Cat. No.:	HY-108695
CAS No.:	80226-00-2
Molecular Formula:	$C_{18}H_{22}O_4$
Molecular Weight:	302.36
Target:	Apoptosis; Endogenous Metabolite
Pathway:	Apoptosis; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Enterodiol is transformed by human intestinal bacteria from lignans contained in various whole-grain cereals, nuts, legumes, flaxseed, and vegetables. Enterodiol has an apoptotic effect in colorectal cancer (CRC) cells. Anti-cancer activities [1][2].
IC_{50} & Target	Human Endogenous Metabolite
In Vitro	Enterodiol (0-100 μM; 24-72 hours) results in an apoptosis rate of up to 40% in CT26 cells. Enterodiol shows no cytotoxicity toward RAW264.7 macrophages[1]. Enterodiol (0-100 μM; 24-48 hours) also suppresses the migration of CRC cells in a concentration-dependent manner. The phosphorylation of ERK, JNK, and p38 is down-regulated with Enterodiol treatment. Enterodiol (0-100 μM; 48 hours) decreases the expression levels of anti-apoptotic proteins in CRC cells[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Enterodiol (1 mg/kg; intra-tumor injection method; once every other day until day 32) suppresses tumor markedly[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	4-8 weeks old female BALB/c nude mice[2]
Dosage:	1 mg/kg
Administration:	Intra-tumor injection method; once every other day until day 32
Result:	A significant reduction in the tumor volume in the experimental groups compared to the PBS group.

REFERENCES

[1]. Shin MK, et al. Apoptotic effect of enterodiol, the final metabolite of edible lignans, in colorectal cancer cells. J Sci Food Agric. 2019;99(5):2411-2419.

[2]. Liu H, et al. Enterolactone has stronger effects than enterodiol on ovarian cancer. J Ovarian Res. 2017;10(1):49. Published 2017 Jul 24.

Caution: Product has not been fully validated for medical applications. For research use only.

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