

Equol

货号: E2284

储存条件: 粉末-20°C 可保存 3 年; 液体-80°C 可保存 12 月。

产品描述

ER (Estrogen Receptor) is the receptor of estrogens. ER is a nuclear hormone receptor. The steroid hormones and their receptors are involved in the regulation of eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues. Ligand-dependent nuclear transactivation involves either direct homodimer binding to a palindromic estrogen response element (ERE) sequence or association with other DNA-binding transcription factors to mediate ERE-independent signaling. Equol is a metabolite produced in vivo from the soy phytoestrogen daidzein. Equol is a ligand for ER. According to a report, equol had 13 fold higher binding affinity preferential for ER β than ER α , with K_i of 16 nM as detected by binding assays. Other data suggested that equol stimulated the growth of ER positive MCF-7 cells in a concentration-dependent manner when used between 10 nM to 10 μ M. However, equol inhibited the growth of human prostate cancer LnCaP, DU145 and PC3 cells, with IC50s of 169 μ M, 140 μ M and 119 μ M, as detected at 72h time point by MTT method. In PC3 cells, equol caused cell cycle arrest in the G2/M phase at the concentration of 150 μ M and induced apoptosis at the concentration of 100 μ M when incubated for 48h. In a PC3 xenograft model established in Balb/c nude mice, equol intragastrically administrated at the dose of 10 mg/kg daily for 33 days inhibited tumor growth by 43.2% as compared to control group.

产品信息

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| CAS 号 | 531-95-3 | |
| 分子式 | C ₁₅ H ₁₄ O ₃ | |
| 分子量 | 242.27 | |
| 溶解度 | DMSO | 100.0 mg/mL (412.8 mM) |

