

Kaempferol

货号: K6382

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

ERR (Estrogen Related Receptor) is a group of nuclear receptors that is closely related to the estrogen receptor. The main isoforms of ERR are ERR α , ERR β and ERR γ . ERRs act as a site-specific transcription regulator and have been also shown to interact with estrogen and the transcription factor TFIIB by direct protein-protein contact. The binding and regulatory activities of ERRs have been demonstrated in the regulation of a variety of genes. Kaempferol is an inverse agonist of ERR α and ERR γ . Kaempferol dose-dependently inhibited ERR α and ERR γ activity at the concentrations of 5, 10, and 20 μ M. Human cholangiocarcinoma (CCA) cells HCCC9810 or QBC939 were exposed to 30, 60, 90, 120 or 150 μ M kaempferol. Kaempferol significantly inhibited the viability of CCA cells in a time and dose dependent way. Treatment to HepG2 cells by 10 μ M kaempferol for 24h suppressed ERR α and ERR γ target genes PDK2 and PDK4. In a CCA QBC939 xenograft model established in nude mice, kaempferol was i.p. administrated daily at the dose of 20 mg/kg for 3 weeks. Kaempferol significantly inhibited tumor growth and the number of Ki-67 positive tumor cells was lower in kaempferol-treated group than that in the control group. In a BSA-challenged BALB/c mice model of asthma, oral administration of \leq 20 mg/kg kaempferol blocked epithelial cell excrecence and smooth muscle hypertrophy.

作用机制

Kaempferol directly binds the ligand binding domains (LBD) of ERRs.

产品信息

CAS 号	520-18-3	
分子式	C ₁₅ H ₁₀ O ₆	
分子量	286.24	
溶解度	DMSO	26.0 mg/mL (90.8 mM) warming
	Water	Insoluble
	Ethanol	27.0 mg/mL (94.3 mM)

