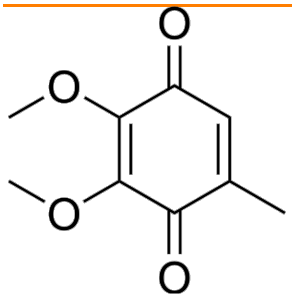
Coenzyme Q0

货号: B26736



产品信息

生物活性	Coenzyme Q0 (CoQ0) is a potent, oral active ubiquinone compound can be derived from *Antrodia cinnamomea*. Coenzyme Q0 induces **apoptosis** and **autophagy**, suppresses of HER-2/AKT/mTOR signaling to potentiate the **apoptosis** and **autophagy** mechanisms. Coenzyme Q0 regulates NFκB/AP-1 activation and enhances Nrf2 stabilization in attenuation of inflammation and redox imbalance. Coenzyme Q0 has anti-angiogenic activity through downregulation of MMP-9/NF-κB and upregulation of HO-1 signaling.
CAS	605-94-7
中文名称	
分子量	182.18
体外研究	Coenzyme Q0 (0-40 μM; 24 h) and inhibits viability and growth of human ovarian carcinoma cells. Coenzyme Q0 (CoQ0) (0-30 μM; 24 h; SKOV-3 cells) has anti-proliferative activity through induction of G2/M cell-cycle arrest and reduction of cell-cycle regulatory proteins. Coenzyme Q0 (CoQ0) (0-30 μM; 0-30 min; SKOV-3 cells) increases intracellular ROS levels to promote SKOV-3 cell death. Coenzyme Q0 (CoQ0) (0-30 μM; 24 h; SKOV-3 cells) induces autophagy by increase accumulation of LC3-II, GFP-LC3 puncta, AVOs formation and Beclin-1/Bcl-2 dysregulation. Coenzyme Q0 (CoQ0) (0-30 μM; 24 h; SKOV-3 cells) induces apoptosis by mitochondrial (caspase-3, PARP and Bax/Bcl-2 dysregulation) and ER stress (caspase-12 and Hsp70) signals. Coenzyme Q0 (CoQ0) (30 μM; 24 h; SKOV-3 cells) suppresses of HER-2/AKT/mTOR signaling to potentiate the apoptosis and autophagy mechanisms. Coenzyme Q0 (CoQ0) (0-10 μM; 0.5-18 h; RAW264.7 cells) regulates NFκB/AP-1 activation and enhances Nrf2 stabilization. Coenzyme Q0 (CoQ0) (5 μM; 0-12 h; EA.hy 926 cells) has anti-angiogenic activity in EA.hy 926 cells. **The accuracy of these methods have not been independently confirmed. They are for reference only.** Cell Viability Assay Cell Line: SKOV-3, A2780 and A2870/CP70 cells Concentration: 0, 10, 20, 30 and 40 μM Incubation Time: 24 hours Result: Decreased viability with the IC_{50} values of 26.6 μM, 27.3 μM and 28.4 μM for SKOV-3, A2780 and A2870/CP70 cells, respectively. Cell Cycle Analysis Cell Line: SKOV-3, A2780 and A2870/CP70 cells Concentration: 0, 10, 20 and 30 μM Incubation Time: 24 hours Result: Arrested cell cycle at G2/M phase and reduced cell-cycle proteins in SKOV-3 cells. Apoptosis Analysis Cell Line: SKOV-3, A2780 and A2870/CP70 cells Concentrat... 0, 5, 15 and 30 μM

	ion: 0, 5, 15 and 30 μM Incubation Time: 24 hours Result: Promoted the conversion of LC3–1 to LC3-II and increased the LC3-II accumulation. Increased Bax/Bcl-2 ratio in a dose-dependent manner. Apoptosis Analysis Cell Line: SKOV-3 cells Concentration: 0, 10, 20 and 30 μM Incubation Time: 24 hours Result: Had the percentage of early apoptotic cells are 25.1%, 34% and 36% for 10, 20 and 30 μM, respectively. Western Blot Analysis Cell Line: SKOV-3 cells Concentration: 0, 5, 15 and 30 μM Incubation Time: 24 hours Result: Activated of caspase-3 and cleavaged of PARP. Increased the expressions of caspase-12, HSP-70 and Bax in a dose-dependent manner, decreased the expressions of Bcl-2. Western Blot Analysis Cell Line: SKOV-3 cells Concentration: 30 μM Incubation Time: 24 hours Result: Decreased the phosphorylated HER-2 (Y1221) levels, p-AKT (Ser473) and p-mTOR (S2448) levels. Western Blot Analysis Cell Line: RAW264.7 cells Concentration: 0, 2.5, 5 and 10 μM Incubation Time: 0.5-18 hours Result: Inhibited iNOS/COX-2 protein expressions with reductions of NO, PGE2, TNF-α and IL-1β secretions. Western Blot Analysis Cell Line: EA.hy 926 cells Concentration: 5 μM Incubation Time: 0, 1, 3, 6 and 12 hours Result: Increased expressions of heme oxygenase-1 (HO-1) and γ-glutamylcysteine synthetase (γ-GCLC), inhibits protein expressions of matrix metalloproteinase-9 (MMP-9), reduces TNF-α-induced nuclear translocation and transcriptional activation of nuclear factor-κB (NF-κB).
体内研究	
形式	Solid
运输条件	Room temperature in continental US; may vary elsewhere.
保存条件	

溶解性	In Vitro: **DMSO：50 mg/mL** (**274.45 mM;** Need ultrasonic) 配制储备液 浓度溶剂体积质量 1 mg 5 mg 10 mg 1 mM 5.4891 mL 27.4454 mL 54.8908 mL 5 mM 1.0978 mL 5.4891 mL 10.9782 mL 10 mM 0.5489 mL 2.7445 mL 5.4891 mL * 请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液；一旦配成溶液，**请分装保存，避免反复冻融造成的产品失效**。 **储备液的保存方式和期限：**-80°C, 6 months; -20°C, 1 month。-80°C 储存时，请在 6 个月内使用，-20°C 储存时，请在 1 个月内使用。 In Vivo: 请根据您的实验动物和给药方式选择适当的溶解方案。以下溶解方案都请先按照 **In Vitro** 方式配制澄清的储备液，再依次添加助溶剂： ——为保证实验结果的可靠性，**澄清的储备液可以根据储存条件，适当保存**；体内实验的工作液，**建议您现用现配，当天使用**； 以下溶剂前显示的百 分比是指**该溶剂在您配制终溶液中的体积占比**；如在配制过程中出现沉淀、析出现象，可以通过**加热和/或超声的方式助溶** • 1. 请依序添加每种溶剂： 10% DMSO 40% PEG300 5% Tween-80 45% saline Solubility: ≥ 1.67 mg/mL (9.17 mM); Clear solution 此方案可获得 ≥ 1.67 mg/mL (9.17 mM，饱和度未知) 的澄清溶液。 以 1 mL 工作液为例，取 100 μL 16.7 mg/mL 的澄清 DMSO 储备液加到 400 μL PEG300 中，混合均匀；向上述体系中加入50 μL Tween-80，混合均匀；然后继续加入 450 μL生理盐水定容至 1 mL。 将 0.9 g 氯化钠，完全溶解于 100 mL ddH₂O 中，得到澄清透明的生理盐水溶液 • 2. 请依序添加每种溶剂： 10% DMSO 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.67 mg/mL (9.17 mM); Clear solution 此方案可获得 ≥ 1.67 mg/mL (9.17 mM，饱和度未知) 的澄清溶液。 以 1 mL 工作液为例，取 100 μL 16.7 mg/mL 的澄清 DMSO 储备液加到 900 μL 20% 的 SBE-β-CD 生理盐水水溶液中，混合均匀。 将 2 g 磺丁基醚 β-环糊精加入 5 mL 生理盐水中，再用生理盐水定容至 10 mL，完全溶解，澄清透明 *以上所有助溶剂都可在 MCE 网站选购。
纯度	≥99.0%