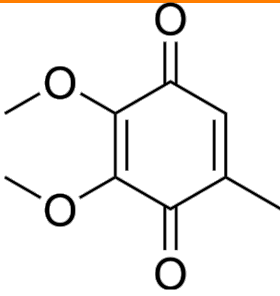


Coenzyme Q0

货号: **AYB26736**



产品信息

生物活性	Coenzyme Q0 (CoQ0) is a potent, oral active ubiquinone compound can be derived from <i>Antrrodia cinnamomea</i> . 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	<p>Coenzyme Q0 (0-40 μM; 24 h) and inhibits viability and growth of human ovarian carcinoma cells.</p> <p>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.</p> <p>Coenzyme Q0 (CoQ0) (0-30 μM; 0-30 min; SKOV-3 cells) increases intracellular ROS levels to promote SKOV-3 cell death.</p> <p>Coenzyme Q0 (CoQ0) (0-30 μM; 24 h; SKOV-3 cells) induces autophagy by increase accumulation of LC3-I, GFP-LC3 puncta, AVOs formation and Beclin-1/Bcl-2 dysregulation.</p> <p>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.</p> <p>Coenzyme Q0 (CoQ0) (30 μM; 24 h; SKOV-3 cells) suppresses of HER-2/AKT/mTOR signaling to potentiate the apoptosis and autophagy mechanisms.</p> <p>Coenzyme Q0 (CoQ0) (0-10 μM; 0.5-18 h; RAW264.7 cells) regulates NFκB/AP-1 activation and enhances Nrf2 stabilization.</p> <p>Coenzyme Q0 (CoQ0) (5 μM; 0-12 h; EA.hy 926 cells) has anti-angiogenic activity in EA.hy 926 cells.</p> <p>The accuracy of these methods have not been independently confirmed. They are for reference only.</p> <p>Cell Viability Assay</p> <p>Cell Line: SKOV-3, A2780 and A2870/CP70 cells</p> <p>Concentration: 0, 10, 20, 30 and 40 μM</p> <p>Incubation Time: 24 hours</p> <p>Result: Decreased viability with the IC₅₀ values of 26.6 μM, 27.3 μM and 28.4 μM for SKOV-3, A2780 and A2870/CP70 cells, respectively.</p> <p>Cell Cycle Analysis</p> <p>Cell Line: SKOV-3, A2780 and A2870/CP70 cells</p> <p>Concentration: 0, 10, 20 and 30 μM</p> <p>Incubation Time: 24 hours</p> <p>Result: Arrested cell cycle at G2/M phase and reduced cell-cycle proteins in SKOV-3 cells.</p> <p>Apoptosis Analysis</p> <p>Cell Line: SKOV-3, A2780 and A2870/CP70 cells</p> <p>Concentration: 0, 5, 15 and 30 μM</p>

ion:

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 μ M

Incubation Time: 24 hours

Result: Had the percentage of early apoptotic cells are 25.1%, 34% and 36% for 10, 20 and 30 μ M, respectively.

Western Blot Analysis

Cell Line: SKOV-3 cells

Concentration: 0, 5, 15 and 30 μ M

Incubation Time: 24 hours

Result: Activated of caspase-3 and cleaved 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 μ M

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 μ M

Incubation Time: 0.5-18 hours

Result: Inhibited iNOS/COX-2 protein expressions with reductions of NO, PGE2, TNF- α and IL-1 β secretions.

Western Blot Analysis

Cell Line: EA.hy 926 cells

Concentration: 5 μ M

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- κ B (NF- κ B).

体内研究	
形式	Solid
运输条件	Room temperature in continental US; may vary elsewhere.
保存条件	

<p>溶解性</p>	<p>In Vitro: DMSO : 50 mg/mL (274.45 mM; Need ultrasonic)</p> <p>配制储备液</p> <table border="1"> <thead> <tr> <th>浓度</th> <th>溶剂</th> <th>体积</th> <th>质量</th> </tr> </thead> <tbody> <tr> <td>1 mM</td> <td>5.4891 mL</td> <td>27.4454 mL</td> <td>54.8908 mg</td> </tr> <tr> <td>5 mM</td> <td>1.0978 mL</td> <td>5.4891 mL</td> <td>10.9782 mg</td> </tr> <tr> <td>10 mM</td> <td>0.5489 mL</td> <td>2.7445 mL</td> <td>5.4891 mg</td> </tr> </tbody> </table> <p>*</p> <p>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。</p> <p>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。</p> <p>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：</p> <p>——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</p> <ul style="list-style-type: none"> 1. <p>请依序添加每种溶剂： 10% DMSO 40% PEG300 5% Tween-80 45% saline</p> <p>Solubility: ≥ 1.67 mg/mL (9.17 mM); Clear solution</p> <p>此方案可获得 ≥ 1.67 mg/mL (9.17 mM, 饱和度未知) 的澄清溶液。</p> <p>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。</p> <p>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</p> 2. <p>请依序添加每种溶剂： 10% DMSO 90% (20% SBE-β-CD in saline)</p> <p>Solubility: ≥ 1.67 mg/mL (9.17 mM); Clear solution</p> <p>此方案可获得 ≥ 1.67 mg/mL (9.17 mM, 饱和度未知) 的澄清溶液。</p> <p>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。</p> <p>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</p> <p>*以上所有助溶剂都可在 MCE 网站选购。</p>	浓度	溶剂	体积	质量	1 mM	5.4891 mL	27.4454 mL	54.8908 mg	5 mM	1.0978 mL	5.4891 mL	10.9782 mg	10 mM	0.5489 mL	2.7445 mL	5.4891 mg
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<p>纯度</p>	<p>≥99.0%</p>																