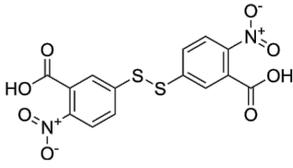


DTNB

货号: **AYB26677**

产品信息

生物活性	DTNB (Ellman's Reagent) is a chemical used to quantify the number or concentration of thiol groups.
CAS	69-78-3
中文名称	Ellman试剂
分子量	396.35
体外研究	<p>DTNB reacts with the free sulfhydryl side chain of cysteine to form an S-S bond between the protein and a thionitrobenzoic acid (TNB) residue.</p> <p>The main advantage of DTNB over alternative reagents (e.g., N-ethylmaleimide or iodoacetamide) is in the selectivity of this reagent and in the ability to follow the course of the reaction spectrophotometrically.</p> <p>Modification of Enzyme with DTNB: Modification of the SH groups of the enzyme is carried out by reacting 10 μL of 10 mM DTNB solution (about a 20-fold molar excess) at room temperature with 0.6 mL of enzyme solution (0.807 mg/mL) in 80 mM phosphate buffer, pH 8.0, containing 1 mM EDTA, which has been dialyzed previously against the same buffer solution for 24 h. The number of SH groups is estimated from the increase of absorbance at 410 nm using a molar extinction coefficient of $13,600 \text{ M}^{-1}\text{cm}^{-1}$ for thionitrobenzoate ions liberated.</p> <p>The accuracy of these methods have not been independently confirmed. They are for reference only.</p>
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 : 100 mg/mL (252.30 mM); ultrasonic and warming and heat to 60°C)</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>2.5230 mL</td> <td>12.6151 mL</td> <td>25.2302 mL</td> </tr> <tr> <td>5 mM</td> <td>0.5046 mL</td> <td>2.5230 mL</td> <td>5.0460 mL</td> </tr> <tr> <td>10 mM</td> <td>0.2523 mL</td> <td>1.2615 mL</td> <td>2.5230 mL</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: ≥ 2.08 mg/mL (5.25 mM); Clear solution</p> <p>此方案可获得 ≥ 2.08 mg/mL (5.25 mM, 饱和度未知) 的澄清溶液。</p> <p>以 1 mL 工作液为例，取 100 μL 20.8 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: ≥ 2.08 mg/mL (5.25 mM); Clear solution</p> <p>此方案可获得 ≥ 2.08 mg/mL (5.25 mM, 饱和度未知) 的澄清溶液。</p> <p>以 1 mL 工作液为例，取 100 μL 20.8 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> • 3. <p>请依序添加每种溶剂： 10% DMSO 90% corn oil</p> <p>Solubility: ≥ 2.08 mg/mL (5.25 mM); Clear solution</p> <p>此方案可获得 ≥ 2.08 mg/mL (5.25 mM, 饱和度未知) 的澄清溶液，此方案不适用于实验周期在半个月以上的实验。</p> <p>以 1 mL 工作液为例，取 100 μL 20.8 mg/mL 的澄清 DMSO 储备液加到 900 μL 玉米油中，混合均匀。</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	2.5230 mL	12.6151 mL	25.2302 mL	5 mM	0.5046 mL	2.5230 mL	5.0460 mL	10 mM	0.2523 mL	1.2615 mL	2.5230 mL
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<p>纯度</p>	<p>≥98.0%</p>																