



上海源叶生物科技有限公司
 Shanghai yuanye Bio-Technology Co., Ltd
 电话: 021-61312973 传真: 021-55068248
 网址: www.shyuanye.com
 邮箱: shyysw@sina.com

产品名称: **CBR-5884**
 产品别名: **CBR-5884**

| 生物活性: | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---------------------------|--------------|------------|------------|-------|---------------|--|--|--|--|------|-----------|------------|------------|--|------|-----------|-----------|-----------|--|-------|-----------|-----------|-----------|
| Description | CBR-5884 is an active, selective inhibitor of phosphoglycerate dehydrogenase (PHGDH) with an IC50 of 33 μ M. CBR-5884 inhibits de novo serine synthesis in cancer cells and is selectively toxic to cancer cell lines with high serine biosynthetic activity. CBR-5884 selectively inhibits the proliferation of melanoma and breast cancer lines that have a high propensity for serine synthesis[1]. | | | | | | | | | | | | | | | | | | | | | | | | |
| IC₅₀ & Target | PHGDH, serine synthesis[1] | | | | | | | | | | | | | | | | | | | | | | | | |
| In Vitro | CBR-5884 (15 or 30 μ M; 3-5 days) selectively inhibits the proliferation of melanoma and breast cancer lines that have a high propensity for serine synthesis. | | | | | | | | | | | | | | | | | | | | | | | | |
| | Cell Proliferation Assay[1] | | | | | | | | | | | | | | | | | | | | | | | | |
| | Cell Line: Breast and melanoma cell lines | | | | | | | | | | | | | | | | | | | | | | | | |
| | Concentration: 15 or 30 μ M | | | | | | | | | | | | | | | | | | | | | | | | |
| | Incubation Time: 3-5 days | | | | | | | | | | | | | | | | | | | | | | | | |
| Result: Inhibited the proliferation of melanoma and breast cancer lines. | | | | | | | | | | | | | | | | | | | | | | | | | |
| Solvent&Solubility | In Vitro: DMSO : 50 mg/mL (148.64 mM; Need ultrasonic) H₂O : < 0.1 mg/mL (insoluble) | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th rowspan="2">Preparing Stock Solutions</th> <th>Solvent Mass</th> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> <tr> <th>Concentration</th> <td></td> <td></td> <td></td> </tr> </thead> <tbody> <tr> <td></td> <td>1 mM</td> <td>2.9727 mL</td> <td>14.8637 mL</td> <td>29.7274 mL</td> </tr> <tr> <td></td> <td>5 mM</td> <td>0.5945 mL</td> <td>2.9727 mL</td> <td>5.9455 mL</td> </tr> <tr> <td></td> <td>10 mM</td> <td>0.2973 mL</td> <td>1.4864 mL</td> <td>2.9727 mL</td> </tr> </tbody> </table> | Preparing Stock Solutions | Solvent Mass | 1 mg | 5 mg | 10 mg | Concentration | | | | | 1 mM | 2.9727 mL | 14.8637 mL | 29.7274 mL | | 5 mM | 0.5945 mL | 2.9727 mL | 5.9455 mL | | 10 mM | 0.2973 mL | 1.4864 mL | 2.9727 mL |
| | Preparing Stock Solutions | | Solvent Mass | 1 mg | 5 mg | 10 mg | | | | | | | | | | | | | | | | | | | |
| | | Concentration | | | | | | | | | | | | | | | | | | | | | | | |
| | | 1 mM | 2.9727 mL | 14.8637 mL | 29.7274 mL | | | | | | | | | | | | | | | | | | | | |
| | | 5 mM | 0.5945 mL | 2.9727 mL | 5.9455 mL | | | | | | | | | | | | | | | | | | | | |
| | | 10 mM | 0.2973 mL | 1.4864 mL | 2.9727 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: \geq 2.08 mg/mL (6.18 mM); Clear solution | | | | | | | | | | | | | | | | | | | | | | | | | |
| 此方案可获得 \geq 2.08 mg/mL (6.18 mM, 饱和度未知) 的澄清溶液。 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 以 1 mL 工作液为例，取 100 μ L 20.8 mg/mL 的澄清 DMSO 储备液加到 400 μ L PEG300 中，混合均匀；向上述体系中加入 50 μ L Tween-80，混合均匀；然后继续加入 450 μ L 生理盐水定容至 1 mL。 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.请依序添加每种溶剂： 10% DMSO →90% corn oil | | | | | | | | | | | | | | | | | | | | | | | | | |



上海源叶生物科技有限公司
Shanghai yuanye Bio-Technology Co., Ltd
电话: 021-61312973 传真: 021-55068248
网址: www.shyuanye.com
邮箱: shyysw@sina.com

| | |
|-------------------|---|
| | <p>Solubility: ≥ 2.08 mg/mL (6.18 mM); Clear solution</p> <p>此方案可获得 ≥ 2.08 mg/mL (6.18 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> |
| References | <p>[1]. Edouard Mullarky et al. Identification of a small molecule inhibitor of 3-phosphoglycerate dehydrogenase to target serine biosynthesis in cancers Proc Natl Acad Sci U S A, 2016 Feb 16, 113(7):1778-83.</p> |



源叶生物