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产品名称: ARV-825

产品别名: ARV-825

### 生物活性:

Description	ARV-825 is a BRD4 degrader based on PROTAC technology. ARV-825 binds to BD1 and BD2 of BRD4 with $K_d$ s of 90 and 28 nM, respectively.																															
<b>IC<sub>50</sub> &amp; Target</b>	Kd: 90 nM (Bromodomain 1 of BRD4), 28 nM (Bromodomain 2 of BRD4) <sup>[1]</sup>																															
<b>In Vitro</b>	ARV-825 is a hetero-bifunctional proteolysis-targeting chimera (PROTAC) that recruits BRD4 to the E3 ubiquitin ligase cereblon. ARV-825 actively recruits BRD4 to cereblon, resulting in the rapid and efficient degradation of the former via the proteasome. Given that BRD4 and cereblon binding moieties in ARV-825 have $K_d$ s of 28-90 nM and ~3 $\mu$ M to their respective targets, this suggests that ARV-825 acts in a substoichiometric way in mediating BRD4 degradation. ARV-825 treatment results in prolonged BRD4 down-regulation and downstream signaling suppression compared to BRD4 inhibitors <sup>[1]</sup> .																															
	<b>In Vitro:</b> <b>DMSO : <math>\geq</math> 50 mg/mL (54.15 mM)</b> * " $\geq$ " means soluble, but saturation unknown.																															
	<table border="1"><thead><tr><th rowspan="2">Preparing Stock Solutions</th><th>Solvent</th><th>Mass</th><th>Concentration</th><th></th></tr><tr><th></th><th>1 mg</th><th></th><th>5 mg</th><th>10 mg</th></tr></thead><tbody><tr><td></td><td>1 mM</td><td>1.0829 mL</td><td></td><td>5.4146 mL</td><td>10.8292 mL</td></tr><tr><td></td><td>5 mM</td><td>0.2166 mL</td><td></td><td>1.0829 mL</td><td>2.1658 mL</td></tr><tr><td></td><td>10 mM</td><td>0.1083 mL</td><td></td><td>0.5415 mL</td><td>1.0829 mL</td></tr></tbody></table>				Preparing Stock Solutions	Solvent	Mass	Concentration			1 mg		5 mg	10 mg		1 mM	1.0829 mL		5.4146 mL	10.8292 mL		5 mM	0.2166 mL		1.0829 mL	2.1658 mL		10 mM	0.1083 mL		0.5415 mL	1.0829 mL
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	*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。																															
	<b>In Vivo:</b> 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 <b>Solubility: <math>\geq</math> 2.5 mg/mL (2.71 mM); Clear solution</b> 此方案可获得 $\geq$ 2.5 mg/mL (2.71 mM, 饱和度未知) 的澄清溶液。 以 1 mL 工作液为例, 取 100 $\mu$ L 25.0 mg/mL 的澄清 DMSO 储备液加到 400 $\mu$ L PEG300 中, 混合均匀, 向上述体系中加入 50 $\mu$ L Tween-80, 混合均匀, 然后继续加入 450 $\mu$ 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 <b>Solubility: <math>\geq</math> 2.5 mg/mL (2.71 mM); Clear solution</b> 此方案可获得 $\geq$ 2.5 mg/mL (2.71 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。																															
<b>Solvent&amp;Solubility</b>																																



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	以 1 mL 工作液为例, 取 100 $\mu$ L 25.0 mg/mL 的澄清 DMSO 储备液加到 900 $\mu$ L 玉米油中, 混合均匀。
<b>References</b>	[1]. Lu J, et al. Hijacking the E3 Ubiquitin Ligase Cereblon to Efficiently Target BRD4. <i>Chem Biol.</i> 2015 Jun 18;22(6):755-63.
<b>实验参考:</b>	
<b>Kinase Assay</b>	Affinity of compounds (e.g., ARV-825) with Bromodomain 1 and 2 of BRD4 is determined with BROMOscan by DiscoverX[1].
<b>References</b>	[1]. Lu J, et al. Hijacking the E3 Ubiquitin Ligase Cereblon to Efficiently Target BRD4. <i>Chem Biol.</i> 2015 Jun 18;22(6):755-63.



# 源叶生物