产品名称：**A-1331852**
产品别名：**A-1331852**

生物活性：

Description	A-1331852 is an orally available BCL-XL selective inhibitor with a Ki of less than 10 pM.			
IC_{50} & Target	Bcl-xL	Bcl-W	Bcl-2	Mcl-1
	0.01 nM (Ki)	4 nM (Ki)	6 nM (Ki)	142 nM (Ki)
In Vitro	A-1331852 selectively disrupts BCL-XL–BIM complexes and induces the hallmarks of apoptosis in BCL-XL–dependent Molt-4 cells with IC50s in the low nanomolar range but does not affect MEF cells lacking BAK or BAX. In CellTiter-Glo cell viability assay, A-1331852 inhibits NCI-H847, NCI-H1417, SET-2, HEL, OCI-M2 with EC50 values of 3, 7, 80, 120 and 100 nM[1].			
In Vivo	A-1331852 demonstrates antitumor efficacy in the Molt-4 xenograft model, inducing tumor regressions as a single agent. Additionally, A-1331852 combines with venetoclax to recapitulate the efficacy of navitoclax in the NCI-H1963.FP5 xenograft model of SCLC. A-1331852 significantly inhibits tumor growth in seven subcutaneous xenograft models of solid tumors, including breast cancer, NSCLC, and ovarian cancer[1].			

Solvent&Solubility

In Vitro:

DMSO : ≥ 50 mg/mL (**75.89 mM**)

H_2O : < 0.1 mg/mL (insoluble)

* "≥" means soluble, but saturation unknown.

	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.5179 mL	7.5894 mL	15.1789 mL
	5 mM	0.3036 mL	1.5179 mL	3.0358 mL
	10 mM	0.1518 mL	0.7589 mL	1.5179 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: ≥ 2.5 mg/mL (3.79 mM); Suspended solution

此方案可获得 ≥ 2.5 mg/mL (3.79 mM，饱和度未知) 的均匀悬浊液，悬浊液可用于口服和腹腔注射。

以 1 mL 工作液为例，取 100 μL 25.0 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。

2.请依序添加每种溶剂： 10% DMSO→ 90% (20% SBE-β-CD in saline)

Solubility: 2.5 mg/mL (3.79 mM); Suspended solution; Need ultrasonic

此方案可获得 2.5 mg/mL (3.79 mM)的均匀悬浊液，悬浊液可用于口服和腹腔注射。

源叶生物

	以 1 mL 工作液为例，取 100 μL 25.0 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。 3.请依序添加每种溶剂： 10% DMSO →90% corn oil Solubility: ≥ 2.5 mg/mL (3.79 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (3.79 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。 以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 900 μL 玉米油中，混合均匀。
References	[1]. Leverson JD, et al. Exploiting selective BCL-2 family inhibitors to dissect cell survival dependencies and define improved strategies for cancer therapy. Sci Transl Med. 2015 Mar 18;7(279):279ra40.

实验参考：

Cell Assay	SCLC and AML cell lines are incubated with increasing concentrations of navitoclax, venetoclax, or A-1155463 for 48 hours before assessing cell viability. Cell killing EC50 values are calculated[1].
Animal Administration	Mice: The growth inhibition of established tumors in SCID-bg mice is studied. A-1331852 is administered orally daily for 14 days at 25 mg/kg and RP-56976 is administered intravenously at 7.5 mg/kg. The change of tumor volume is monitored daily[1].
References	[1]. Leverson JD, et al. Exploiting selective BCL-2 family inhibitors to dissect cell survival dependencies and define improved strategies for cancer therapy. Sci Transl Med. 2015 Mar 18;7(279):279ra40.

源叶生物