产品名称：2-[8-[(2-苯并噻唑基氨基)羰基]-3,4-二氢-2(1H)-异喹啉基]-5-[3-[4-[3-(二甲基氨基)-1-丙炔-1-基]-2-氟苯氧基]丙基]-4-噻唑羧酸
产品别名：A-1155463

生物活性：

Description	A-1155463 is a highly potent and selective BCL-XL inhibitor with an EC50 of 70 nM in Molt-4 cell.	
IC_{50} & Target	Bcl-xL	Bcl-2
	0.01 nM (Ki)	80 nM (Ki)
In Vitro	A-1155463 shows picomolar binding affinity to BCL-XL (Ki＜0.01 nM), and >1000-fold weaker binding to BCL-2 (Ki= 80 nM) and related proteins BCL-W (Ki= 19 nM) and MCL-1 (Ki> 440 nM) [2]. A-1155463 demonstrates strong growth inhibition of over half of the colorectal cell lines as defined by EC50 values ≤ 0.5 μM in the presence of 10 % FBS[3].	
In Vivo	A-1155463 caused a mechanism-based and reversible thrombocytopenia in mice and inhibited H146 small cell lung cancer xenograft tumor growth in vivo following multiple doses[2].	

Solvent&Solubility

In Vitro:

DMSO : 50 mg/mL (74.65 mM; Need ultrasonic)

H_2O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.4930 mL	7.4650 mL	14.9301 mL
	5 mM	0.2986 mL	1.4930 mL	2.9860 mL
	10 mM	0.1493 mL	0.7465 mL	1.4930 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 (3.73 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (3.73 mM，饱和度未知) 的澄清溶液。

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 (3.73 mM); Suspended solution; Need ultrasonic

此方案可获得 2.5 mg/mL (3.73 mM)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 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 (3.73 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (3.73 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):279 [2]. Tao ZF, et al. Discovery of a Potent and Selective BCL-XL Inhibitor with in Vivo Activity. ACS Med Chem Lett. 2014 Aug 26;5(10):1088-93. [3]. Zhang H, et al. Genomic analysis and selective small molecule inhibition identifies BCL-X(L) as a critical survival factor in a subset of colorectal cancer. Mol Cancer. 2015 Jul 2;14:126.

实验参考：

Animal Administration	Mice: Following a single 5 mg/kg IP dose of A-1155463 in nontumor bearing SCID-Beige mice, platelet counts fell dramatically as measured at 6 h postdose and then rebounded to normal levels within 72 h. A-1155463 is then administered to SCID-Beige mice that had been inoculated with BCL-XL-dependent H146 tumor cells with a daily dose at 5 mg/kg IP for 14 days[2].
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):279 [2]. Tao ZF, et al. Discovery of a Potent and Selective BCL-XL Inhibitor with in Vivo Activity. ACS Med Chem Lett. 2014 Aug 26;5(10):1088-93. [3]. Zhang H, et al. Genomic analysis and selective small molecule inhibition identifies BCL-X(L) as a critical survival factor in a subset of colorectal cancer. Mol Cancer. 2015 Jul 2;14:126.