产品名称：MI 2 (MALT1 inhibitor)
产品别名：MALT1 inhibitor MI-2

生物活性：

Description	MALT1 inhibitor MI-2 is a MALT1 inhibitor (IC_{50}=5.84 μM). MALT1 inhibitor MI-2 binds directly to MALT1, irreversibly suppresses protease function and is accompanied by NF-κB reporter activity suppression, c-REL nuclear localization inhibition, and NF-κB target gene downregulation. MALT1 inhibitor MI-2 shows nontoxic to animals[1].
IC_{50} & Target	IC50: 5.84 μM (MALT1)[1]
In Vitro	MALT1 inhibitor MI-2 (1-1000 nM; 48 hours) selectively suppresses MALT1-dependent DLBCL cell lines, and the GI_{50} in HBL-1, TMD8, OCI-Ly3, and OCI-Ly10 cells is 0.2, 0.5, 0.4, and 0.4 μM, respectively[1]. MALT1 inhibitor MI-2 (62-1000 nM; 24 hours) causes a dose-dependent decrease in MALT1-mediated cleavage[1].

Cell Proliferation Assay[1]	
Cell Line:	HBL-1, TMD8, OCI-Ly3, OCI-Ly10 cells
Concentration:	1, 10, 100, 1000 nM
Incubation Time:	48 hours
Result:	The GI_{50} in HBL-1, TMD8, OCI-Ly3, and OCI-Ly10 cells was 0.2, 0.5, 0.4, and 0.4 μM, respectively.

Western Blot Analysis[1]	
Cell Line:	HBL-1 cells
Concentration:	62, 125, 250, 500, 1000 nM
Incubation Time:	24 hours
Result:	Inhibits MALT1 cleavage of CYLD in HBL-1 cells.

In Vivo	MALT1 inhibitor MI-2 (25 mg/kg; i.p.; daily for 14 days) profoundly suppresses the growth of both the TMD8 and HBL-1 ABC-DLBCL xenografts[1].
Animal Model:	Eight-week-old male SCID NOD (bearing HBL-1 and TMD8 cells) [1]
Dosage:	25 mg/kg
Administration:	Intraperitoneal injection; daily for 14 days
Result:	Profoundly suppressed the growth of both the TMD8 and HBL-1 ABC-DLBCL xenografts versus vehicle.

In Vitro:

DMSO : ≥ 46 mg/mL (100.94 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	**1 mg**	**5 mg**	**10 mg**
	1 mM	2.1943 mL	10.9716 mL	21.9433 mL
	5 mM	0.4389 mL	2.1943 mL	4.3887 mL
	10 mM	0.2194 mL	1.0972 mL	2.1943 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。

Solvent&Solubility	***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 (5.49 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (5.49 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% corn oil Solubility: ≥ 2.5 mg/mL (5.49 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (5.49 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]. Fontan L, et al. MALT1 small molecule inhibitors specifically suppress ABC-DLBCL in vitro and in vivo. Cancer Cell. 2012 Dec 11;22(6):812-24.