产品名称：**CCF642**
产品别名：**CCF642**

生物活性：

Description

CCF642 is a novel PDI-inhibiting compound with antimyeloma activity. The IC50 is 2.9 μmol/L. In vitro: CCF642 inhibit PDI reductase activity about 100-fold more potently than the structurally distinct established inhibitors PACMA 31 and LOC14. CCF642 causes acute ER stress in multiple myeloma cells accompanied by apoptosis-inducing calcium release. In vivo: CCF642 displayed potent efficacy in an aggressive syngeneic mouse model of multiple myeloma and prolonged the lifespan of C57BL/KaLwRij mice engrafted with 5TGM1-luc myeloma, an effect comparable to the first-line multiple myeloma therapeutic bortezomib. CCF642 can be given intravenously without injection reactions in mice with 10 mg/kg.

Solvent&Solubility

In Vitro:

DMSO : ≥ 30 mg/mL (79.27 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6424 mL	13.2118 mL	26.4236 mL
	5 mM	0.5285 mL	2.6424 mL	5.2847 mL
	10 mM	0.2642 mL	1.3212 mL	2.6424 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: 0.62 mg/mL (1.64 mM); Suspended solution; Need ultrasonic

此方案可获得 0.62 mg/mL (1.64 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 6.2 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。

References

[1]. Vatolin S et al. Novel Protein Disulfide Isomerase Inhibitor with Anticancer Activity in Multiple Myeloma. Cancer Res. 2016 Jun 1;76(11):3340-50.