产品名称：**NVP-TNKS656**
产品别名：**NVP-TNKS656**

生物活性：

Description	NVP-TNKS656 is a highly potent, selective, and orally active TNKS2 inhibitor with IC_{50} of 6 nM, and is > 300 fold selectivity against PARP1 and PARP2.	
IC_{50} & Target	TNKS2	PARP2
	6 nM (IC_{50})	32 μM (IC_{50})
In Vitro	NVP-TNKS656 (30 or 100 mg/kg, p.o.) exhibits good exposure and moderate oral bioavailability of 32% and 53%, respectively. Some slight overproportional increase in oral exposure is observed between 30 and 100 mg/kg with the dose normalized AUC for the 100 mg/kg dose being 2-fold higher than for the 30 mg/kg dose. Mice treated with NVP-TNKS656 (350 mg/kg, p.o.) show good plasma and tumor exposures corresponding to AUC0-24h of 515 and 325 μM·h, respectively[1].	

Solvent&Solubility

In Vitro:

DMSO : ≥ 40 mg/mL (80.88 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.0219 mL	10.1096 mL	20.2192 mL
	5 mM	0.4044 mL	2.0219 mL	4.0438 mL
	10 mM	0.2022 mL	1.0110 mL	2.0219 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 (5.05 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (5.05 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 (5.05 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (5.05 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 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 (5.05 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (5.05 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]. Shultz MD, et al. Identification of NVP-TNKS656: the use of structure-efficiency relationships to generate a highly potent, selective, and orally active tankyrase inhibitor. J Med Chem. 2013 Aug 22;56(16):6495-511.

实验参考：

Animal Administration	Athymic female nude mice weighing 19-22 g are implanted subcutaneously with a 3×3×3 mm^3 tumor fragment from an MMTV-Wnt1 tumor-bearing mouse. Tumors are grown to approximately 250-300 mm^3. Individual mice are given a single oral dose of vehicle (n=3) (4% HCl:10% propylene glycol:20% Solutol HS15:60.5% D5W:0.5% NaOH) or TNKS656 at 350 mg/kg (n=18). At 0.5, 1, 2, 4, 8, 16, or 24 h following dosing (n=3/time point), mice are euthanized, and blood is collected via cardiac puncture and processed for plasma. Tumors are excised from mice and frozen at −80°C for PD analysis. [1]
References	[1]. Shultz MD, et al. Identification of NVP-TNKS656: the use of structure-efficiency relationships to generate a highly potent, selective, and orally active tankyrase inhibitor. J Med Chem. 2013 Aug 22;56(16):6495-511.