产品名称：**SRPIN340**
产品别名：**SRPIN340**

生物活性：

Description	SRPIN340 is an ATP-competitive serine-arginine-rich protein kinase (SRPK) inhibitor, with a Ki of 0.89 μM for SRPK1.
IC_{50} & Target	Ki: 0.89 μM (SRPK1)[1]
In Vitro	SRPIN340 is a serine-arginine-rich protein kinase (SRPK) inhibitor, with a Ki of 0.89 μM for SRPK1. SRPIN340 also inhibits SRPK2, but shows no significant inhibition on other SRPK, such as Clk1 and Clk4. SRPIN340 promotes degradation of SRp75, which is necessary for HIV expression. SRPIN340 suppresses the propagation of Sindbis virus (IC50, 60 μM) as well as severe acute respiratory syndrome virus[1]. SRPIN340 shows inhibitory effect on leukemia cell lines, such as AML HL60, ALL-T Molt4 and Jurkat, with IC50s of 44.7 μM, 92.2 μM and 82.3 μM, respectively[2].
Solvent&Solubility	***In Vitro:*** **DMSO : ≥ 42 mg/mL (120.22 mM)** * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.8625 mL	14.3123 mL	28.6246 mL
	5 mM	0.5725 mL	2.8625 mL	5.7249 mL
	10 mM	0.2862 mL	1.4312 mL	2.8625 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→ 90% (20% SBE-β-CD in saline)

Solubility: ≥ 2.5 mg/mL (7.16 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (7.16 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。

References	[1]. Fukuhara T, et al. Utilization of host SR protein kinases and RNA-splicing machinery during viral replication. Proc Natl Acad Sci U S A. 2006 Jul 25;103(30):11329-33. [2]. Siqueira RP, et al. Potential Antileukemia Effect and Structural Analyses of SRPK Inhibition by N-(2-(Piperidin-1-yl)-5-(Trifluoromethyl)Phenyl)Isonicotinamide (SRPIN340). PLoS One. 2015 Aug 5;10(8):e0134882.

实验参考：	
Cell Assay	Leukemic cells (5 × 10^4 cells/well) and isolated PBMCs (8 × 10^4 cells/well) are seeded in 96-well plates. Each well contained 100 µL of complete RPMI medium and 100 µL of SRPIN340 solution at different concentrations. The compound is diluted in RPMI medium with 10% fetal bovine serum and 0.4% DMSO (v/v). After 48 h of culture, MTT (5 mg/mL) is added to the wells (3 h, 37°C). The plates are centrifuged at room temperature for 30 min 500 ×g, followed by the removal of the MTT solution and the addition of 100 µL/well of DMSO to solubilize the formazan. Absorbance is measured at 540 nm in a microplate reader. Each experimental procedure is performed in triplicate[2].
References	[1]. Fukuhara T, et al. Utilization of host SR protein kinases and RNA-splicing machinery during viral replication. Proc Natl Acad Sci U S A. 2006 Jul 25;103(30):11329-33. [2]. Siqueira RP, et al. Potential Antileukemia Effect and Structural Analyses of SRPK Inhibition by N-(2-(Piperidin-1-yl)-5-(Trifluoromethyl)Phenyl)Isonicotinamide (SRPIN340). PLoS One. 2015 Aug 5;10(8):e0134882.