

产品名称: **SIS3**  
 产品别名: **(E)-SIS3**

生物活性:					
Description	(E)-SIS3 is a specific, cell-permeable, and selective Smad3 inhibitor, which inhibits Smad3 phosphorylation with an IC50 of 3 μM. (E)-SIS3 also inhibits the myofibroblast differentiation of fibroblasts by TGF-β1[1][2].				
In Vitro	(E)-SIS3 completely diminishes the constitutive phosphorylation of Smad3 as well as the up-regulates type I collagen expression in scleroderma fibroblasts. (E)-SIS3 is a useful tool to evaluate the TGF-β-regulated cellular mechanisms via selective inhibition of Smad3[2].				
Solvent&Solubility	<b>In Vitro:</b> <b>DMSO : ≥ 30 mg/mL (61.23 mM)</b>  * "≥" means soluble, but saturation unknown.				
	<div>Preparing Stock Solutions</div>	<div>Solvent / Mass / Concentration</div>	1 mg	5 mg	10 mg
		1 mM	2.0409 mL	10.2043 mL	20.4086 mL
		5 mM	0.4082 mL	2.0409 mL	4.0817 mL
		10 mM	0.2041 mL	1.0204 mL	2.0409 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。 <b>In Vivo:</b> 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 <b>In Vitro</b> 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 (5.10 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (5.10 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。				
	References	<p>[1]. Boudreau HE et al. Wild-type and mutant p53 differentially regulate NADPH oxidase 4 in TGF-β-mediated migration of human lung and breast epithelial cells. Br J Cancer. 2014 May 13;110(10):2569-82.</p> <p>[2]. Jinnin M et al. Characterization of SIS3, a novel specific inhibitor of Smad3, and its effect on transforming growth factor-beta1-induced extracellular matrix expression. Mol Pharmacol. 2006 Feb;69(2):597-607.</p> <p>[3]. Di Bernardini E et al. Endothelial lineage differentiation from induced pluripotent stem cells is regulated by microRNA-21 and transforming growth factor β2 (TGF-β2) pathways. J Biol Chem. 2014 Feb 7;289(6):3383-93.</p>			