

产品名称：**Vidofludimus**
产品别名：**4SC-101; SC12267**

生物活性：																					
Description	Vidofludimus(4SC-101; SC12267) is a novel immunosuppressive drug that inhibits DHODH; inhibits IL-17 secretion in vitro independently of effects on lymphocyte proliferation. IC50 value: Target: DHODH inhibitor in vitro: 4SC-101 is a potent inhibitor of human DHODH, inhibits lymphocyte proliferation, and uniquely blocks phytohemagglutinin-stimulated IL-17 production by lymphocytes [2]. in vivo: In vivo Vido treatment alone most effectively reduced macroscopic and histological pathology and the numbers of CD3+ T cells. In contrast, similarly reduced nuclear signal transducer and activator of transcription 3 (STAT3) binding and IL-17 levels were observed from animals treated with Vido alone and Vido + Uri. Vido improves TNBS-induced colonic inflammation by a unique dual mode of action [1]. Oral administration of 4SC-101 effectively improved both chronic DSS and acute TNBS colitis in mice. In these colitis models the overall efficacy profile of 4SC-101 was similar to that of dexamethasone [2].																				
	In Vitro: DMSO : ≥ 46 mg/mL (129.45 mM) H₂O : < 0.1 mg/mL (insoluble) * "≥" means soluble, but saturation unknown. <table><tr><td rowspan="4">Preparing Stock Solutions</td><td> Solvent / Mass Concentration </td><td>1 mg</td><td>5 mg</td><td>10 mg</td></tr><tr><td>1 mM</td><td>2.8140 mL</td><td>14.0702 mL</td><td>28.1405 mL</td></tr><tr><td>5 mM</td><td>0.5628 mL</td><td>2.8140 mL</td><td>5.6281 mL</td></tr><tr><td>10 mM</td><td>0.2814 mL</td><td>1.4070 mL</td><td>2.8140 mL</td></tr></table> *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 (7.04 mM); Suspended solution; Need ultrasonic 此方案可获得 2.5 mg/mL (7.04 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 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 (7.04 mM); Suspended solution; Need ultrasonic 此方案可获得 2.5 mg/mL (7.04 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 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。					Preparing Stock Solutions	Solvent / Mass Concentration	1 mg	5 mg	10 mg	1 mM	2.8140 mL	14.0702 mL	28.1405 mL	5 mM	0.5628 mL	2.8140 mL	5.6281 mL	10 mM	0.2814 mL	1.4070 mL
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Solvent&Solubility																					

	3.请依序添加每种溶剂： 10% DMSO →90% corn oil Solubility: ≥ 2.5 mg/mL (7.04 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (7.04 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]. Fitzpatrick LR, et al. Vidofludimus inhibits colonic interleukin-17 and improves hapten-induced colitis in rats by a unique dual mode of action. J Pharmacol Exp Ther. 2012 Sep;342(3):850-60. [2]. Fitzpatrick LR, et al. 4SC-101, a novel immunosuppressive drug, inhibits IL-17 and attenuates colitis in two murine models of inflammatory bowel disease. Inflamm Bowel Dis. 2010 Oct;16(10):1763-77.



源叶生物