

产品名称: **SW033291**

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生物活性:						
<b>Description</b>	SW033291 is a potent and high-affinity inhibitor of 15-PGDH with a $K_i$ of 0.1 nM. SW033291 increases prostaglandin PGE2 levels in bone marrow and other tissues. SW033291 also promotes tissue regeneration[1].					
<b>IC<sub>50</sub> &amp; Target</b>	K <sub>i</sub> : 0.1 nM (15-PGDH)[1]					
<b>In Vitro</b>	Treating cells with SW033291 decreases cellular 15-PGDH enzyme activity by 85%. SW033291 inhibition of 15-PGDH was non-competitive versus PGE2 over concentrations up to 40 μM PGE2. Treatment of A549 cells with SW033291 increases PGE2 levels by 3.5-fold at 500 nM, with an EC <sub>50</sub> 50 at approximately 75 nM[1].					
<b>In Vivo</b>	SW033291 (10 mg/kg; intraperitoneal injection; twice daily; for 3 days; C57BL/6J mice) treatment for three consecutive days shows significant benefits, including a doubling of peripheral neutrophil counts, a 65% increase in marrow SKL cells, and a 71% increase in marrow SLAM cells[1].					
	<b>Animal Model:</b>	C57BL/6J mice[1]				
	<b>Dosage:</b>	10 mg/kg				
	<b>Administration:</b>	Intraperitoneal injection; twice daily; for 3 days ( for 5 doses)				
	<b>Result:</b>	Showed significant benefits, including a doubling of peripheral neutrophil counts, a 65% increase in marrow SKL cells, and a 71% increase in marrow SLAM cells.				
<b>Solvent&amp;Solubility</b>	<b>In Vitro:</b> DMSO : 50 mg/mL (121.19 mM; Need ultrasonic)					
	<b>Preparing Stock Solutions</b>	<b>Solvent</b>	<b>Mass</b>	<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
		<b>Concentration</b>				
			1 mM	2.4237 mL	12.1186 mL	24.2371 mL
	5 mM	0.4847 mL	2.4237 mL	4.8474 mL		
	10 mM	0.2424 mL	1.2119 mL	2.4237 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>References</b>	[1]. Zhang Y, et al. TISSUE REGENERATION. Inhibition of the prostaglandin-degrading enzyme 15-PGDH potentiates tissue regeneration. Science. 2015 Jun 12;348(6240):aaa2340.					