

产品名称: SW033291

产品别名: SW033291

生物活性:						
Description		SW033291 is a potent and high-affinity inhibitor of 15-PGDH with a Ki of 0.1 nM. SW033291 increases prostaglandin PGE2 levels in bone marrow and other tissues. SW033291 also promotes tissue regeneration[1].				
IC ₅₀ & Target		Ki: 0.1 nM (15-PGDH)[1]				
In Vitro		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 EC50 50 at approximately 75 nM[1].				
In Vivo		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].				
		Animal Model:	C57BL/6J mice[1]			
		Dosage:	10 mg/kg			
		Administration:	Intraperitoneal injection; twice daily; for 3 days (for 5 doses)			
		Result:	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.			
Solvent&Solubility		In Vitro:				
		DMSO : 50 mg/mL (121.19 mM; Need ultrasonic)				
		Preparing Stock Solutions	<div>Solvent Mass Concentration ↘</div>	1 mg	5 mg	10 mg
			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℃, 6 months; -20℃, 1 month。 -80℃ 储存时，请在 6 个月内使用， -20℃ 储存时，请在 1 个月内使用。						
References		[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.				