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产品名称: **IWP-4**
CAS 号: **686772-17-8**
产品货号: **T16848**

生物活性:				
Description	IWP-4 is a Wnt inhibitor with an IC50 of 25 nM. IWP-4 specifically inhibits casein kinase 1δ/ε (CK1δ/ε), with an IC50 of 1.06 μM against wild-type CK1δ, 1.02 μM against the CK1δ kinase domain, and 7.07 μM against CK1ε; it shows enhanced inhibitory activity against the M82F CK1δ mutant (IC50 = 0.14 μM). IWP-4 is applicable to research related to cancer, Alzheimer's disease (AD), and heart failure[1][2][3].			
IC50 & Target	IC50: 25 nM (Wnt)[1]			
In Vitro	IWP-4 可抑制所有受试癌细胞系的增殖, 其 EC50 值为亚微摩尔级别, 范围为 0.23 μM 至 0.93 μM[1]。 IWP-4 (1 μM; 24 h) 通过逆转 Ginkgolide B 对凋亡相关基因、蛋白及谷氨酸转运体基因、蛋白的调控作用, 拮抗 Ginkgolide B 对谷氨酸损伤原代大鼠皮质星形胶质细胞的保护效应[2]。			
Solvent&Solubility	细胞实验: DMSO 中的溶解度 : 1.72 mg/mL (3.46 mM; 超声助溶 (<60°C); 吸湿的 DMSO 对产品的溶解度有显著影响, 请使用新开封的 DMSO)			
	Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg
		1 mM	2.0136 mL	10.0681 mL
		5 mM	---	---
		10 mM	---	---
	* 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, 2 years; -20°C, 1 year。-80°C 储存时, 请在 2 年内使用, -20°C 储存时, 请在 1 年内使用。			
参考文献	[1]. García-Reyes B, et al. Discovery of Inhibitor of Wnt Production 2 (IWP-2) and Related Compounds As Selective ATP-Competitive Inhibitors of Casein Kinase 1 (CK1) δ/ε. J Med Chem. 2018;61(9):4087-4102. [2]. Wang J, et al. A RNA-seq approach for exploring the protective effect of ginkgolide B on glutamate-induced astrocytes injury. J Ethnopharmacol. 2021;270:113807. [3]. Hudson J, et al. Primitive cardiac cells from human embryonic stem cells. Stem Cells Dev. 2012 Jun 10;21(9):1513-23.			