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产品名称: **MK-0557**

产品别名: **MK-0557**

生物活性:					
Description	MK-0557 is a highly selective, orally available neuropeptide Y5 receptor antagonist with a Ki of 1.6 nM.				
IC ₅₀ & Target	Ki: 1.6 nM (Y5)[1]				
In Vitro	Neuropeptide Y (NPY) is a potent orexigenic neuropeptide, and antagonism of NPY Y1 and NPY Y5 receptors (NPYxR) is considered a potentially important anti-obesity drug target. MK-0557 has a Ki=1.3 nM at the human NPY5R, with similar affinities at rhesus, mouse, and rat NPY5R. MK-0557 has no significant binding to the human NPY1R, NPY2R, NPY4R, or mouse NPY6R at concentrations of 10 μM[2].				
In Vivo	MK-0557 antagonizes the effects of the NPY5R-selective agonist on body-weight gain and hyperphagia in C57BL/6J mice and significantly suppresses the body-weight gain in diet-induced obese (DIO) mice. When lean mice on regular chow are switched to a medium high-fat diet (4.2 kcal/g) and treated with MK-0557 at 30 mg/kg PO QD, MK-0557 causes a 40% reduction in body-weight gain at day 35[2].				
Solvent&Solubility	In Vitro: DMSO : ≥ 28 mg/mL (68.90 mM) * "≥" means soluble, but saturation unknown.				
	Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
		1 mM	2.4606 mL	12.3028 mL	24.6057 mL
		5 mM	0.4921 mL	2.4606 mL	4.9211 mL
		10 mM	0.2461 mL	1.2303 mL	2.4606 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。				
References	[1]. Fichtner M, et al. Discovery and evaluation of spirocyclic derivatives as antagonists of the neuropeptide Y5 receptor. Bioorg Med Chem Lett. 2012 Apr 15;22(8):2738-43. [2]. Erondy N, et al. Neuropeptide Y5 receptor antagonism does not induce clinically meaningful weight loss in overweight and obese adults. Cell Metab. 2006 Oct;4(4):275-82.				