

产品名称: CH 223191

产品别名: CH-223191

生物活性:					
Description	CH-223191 is a potent and specific antagonist of aryl hydrocarbon receptor (AhR). CH-223191 inhibits TCDD-mediated nuclear translocation and DNA binding of AhR, and inhibits TCDD-induced luciferase activity with an IC50 of 0.03 μM[1].				
In Vitro	CH-223191 (0.1-10 μM; pre-treated 1 hour) inhibits TCDD-caused cytochrome P450 1A1 mRNA expression in a in dose-dependent manner[1].				
	CH-223191 (0.1-10 μM; pre-treated 1 hour) causes a concentration-dependent inhibition of TCDD-induced cytochrome P450 enzyme activity[1].				
	RT-PCR[1]				
	Cell Line:	HepG2 cells			
	Concentration:	0.1-10 μM			
	Incubation Time:	1 hour			
	Result:	Caused inhibition of TCDD-induced cytochrome P450 mRNA expression.			
	Western Blot Analysis[1]				
	Cell Line:	HepG2 cells			
	Concentration:	0.1-10 μM			
	Incubation Time:	1 hour			
Result:	Decreased TCDD-caused cytochrome P450 1A1 protein Treatment.				
In Vivo	CH-223191 (10 mg/kg; once a day; 25 days) suppresses cytochrome P450 1A1 expression and the intrahepatocyte fat content in liver, reduces activity of AST and ALT in TCDD-treated mice[1].				
	Animal Model:	Male ICR mice (6 weeks old)[1]			
	Dosage:	10 mg/kg			
	Administration:	10 mg/kg; once a day; 25 days			
	Result:	Prevented TCDD-elicited cytochrome P450 induction, liver toxicity, and wasting syndrome in mice.			
Solvent&Solubility	In Vitro: DMSO : ≥ 35 mg/mL (104.98 mM) * "≥" means soluble, but saturation unknown.				
	Preparing Stock Solutions	Solvent / Mass Concentration	1 mg	5 mg	10 mg
		1 mM	2.9995 mL	14.9974 mL	29.9949 mL
		5 mM	0.5999 mL	2.9995 mL	5.9990 mL
		10 mM	0.2999 mL	1.4997 mL	2.9995 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。				
	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：				

	<p>——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</p> <p>1.请依序添加每种溶剂： 10% DMSO→40% PEG300 →5% Tween-80 → 45% saline Solubility: ≥ 2.5 mg/mL (7.50 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (7.50 mM，饱和度未知) 的澄清溶液。 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。</p> <p>2.请依序添加每种溶剂： 10% DMSO →90% corn oil Solubility: ≥ 2.5 mg/mL (7.50 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (7.50 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。</p>
References	<p>[1]. Zhao B, et al. CH223191 is a ligand-selective antagonist of the Ah (Dioxin) receptor. Toxicol Sci. 2010 Oct;117(2):393-403.</p> <p>[2]. Kim SH, et al. Novel compound 2-methyl-2H-pyrazole-3-carboxylic acid (2-methyl-4-o-tolylazo-phenyl)-amide (CH-223191) prevents 2,3,7,8-TCDD-induced toxicity by antagonizing the aryl hydrocarbon receptor. Mol Pharmacol. 2006 Jun;69(6):1871-8.</p>

源叶生物