



上海源叶生物科技有限公司
Shanghai yuanye Bio-Technology Co., Ltd
电话: 021-61312973 传真: 021-55068248
网址: www.shyuanye.com
邮箱: shyyssw@sina.com

产品名称: **U-99194 MALEATE**

CAS 号: **234757-41-6**

产品货号: **T87479**

生物活性:					
Description	U-99194 (PNU-99194) maleate is a selective, potent dopamine D3 receptor antagonist (Ki =160 nM). U-99194 maleate inhibits the activation of D3 receptor mediated by endogenously released dopamine or exogenous D3 agonists. U-99194 maleate abrogates the IPSC-suppressive effect of the D3 agonist PD 128907 in rat hippocampal slices. U-99194 maleate significantly suppresses Nicotine induced tremor in mice. U-99194 maleate can be used for the study of dopamine D3 receptor-mediated motor disorders, particularly kinetic tremors[1][2].				
IC50 & Target	D3 Receptor 160 nM (Ki)				
In Vitro	U-99194 (1 μM, 15 min) maleate 阻止可卡因诱导的大鼠海马切片 CA1 锥体神经元中从辐射层引发的单突触抑制性突触后电流 (IPSCs) 的抑制作用[2]。 U-99194 (1 μM) maleate 阻断 PD 128907 对大鼠海马切片 CA1 锥体神经元中从辐射层引发的单突触 IPSC 幅度的抑制效应[2]。				
In Vivo	U-99194 (30 mg/kg, 腹腔注射, 一次) maleate 显著抑制 Nicotine 诱导的小鼠震颤[1]。 U-99194 (30 μg/site, 小脑内微量注射, 一次) maleate 显著抑制 Nicotine 诱导的大鼠震颤[1]。				
	Animal Model:	Nicotine (1 mg/kg, i.p.) was injected to induce kinetic tremor in male ddY mice (7-11 weeks of age)[1]			
	Dosage:	30 mg/kg			
	Administration:	i.p., once			
	Result:	Suppressed Nicotine -induced tremor.			
	Animal Model:	Nicotine (1 mg/kg, i.p.) was injected to induce kinetic tremor in Male SD rats (7-11 weeks of age)[1]			
	Dosage:	30 μg/site			
	Administration:	intracerebellar microinjection, once			
In Vivo	Result:	Suppressed Nicotine-induced tremor.			
	细胞实验:				
	DMSO 中的溶解度 : 125 mg/mL (317.69 mM; 超声助溶; 吸湿的 DMSO 对产品的溶解度有显著影响, 请使用新开封的 DMSO)				
	H2O 中的溶解度 : 20 mg/mL (50.83 mM; 超声助溶)				
Solvent&Solubility	Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
		1 mM	2.5415 mL	12.7074 mL	25.4149 mL
		5 mM	0.5083 mL	2.5415 mL	5.0830 mL
		10 mM	0.2541 mL	1.2707 mL	2.5415 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 (sealed storage, away from moisture)。-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。					
参考文献	[1]. Kato M, et al. Mechanisms Underlying Dopaminergic Regulation of Nicotine-Induced Kinetic Tremor. Front Pharmacol. 2022 Jun 16;13:938175.				



上海源叶生物科技有限公司
Shanghai yuanye Bio-Technology Co., Ltd
电话: 021-61312973 传真: 021-55068248
网址: www.shyuanye.com
邮箱: shyyssw@sina.com

[2]. Hammad H, et al. Dopamine-mediated disinhibition in the CA1 region of rat hippocampus via D3 receptor activation. J Pharmacol Exp Ther. 2006 Jan;316(1):113-20.

[3]. Audinot V, et al. A comparative in vitro and in vivo pharmacological characterization of the novel dopamine D3 receptor antagonists (+)-S 14297, nafadotride, GR 103,691 and U 99194. J Pharmacol Exp Ther. 1998 Oct;287(1):187-97.

完整储备液配制表:

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 (sealed storage, away from moisture)。-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。

可选溶剂	质量 溶剂体积 浓度	1 mg	5 mg	10 mg	25 mg
DMSO/H ₂ O	1 mM	2.5415 mL	12.7074 mL	25.4149 mL	63.5372 mL
	5 mM	0.5083 mL	2.5415 mL	5.0830 mL	12.7074 mL
	10 mM	0.2541 mL	1.2707 mL	2.5415 mL	6.3537 mL
	15 mM	0.1694 mL	0.8472 mL	1.6943 mL	4.2358 mL
	20 mM	0.1271 mL	0.6354 mL	1.2707 mL	3.1769 mL
	25 mM	0.1017 mL	0.5083 mL	1.0166 mL	2.5415 mL
	30 mM	0.0847 mL	0.4236 mL	0.8472 mL	2.1179 mL
	40 mM	0.0635 mL	0.3177 mL	0.6354 mL	1.5884 mL
	50 mM	0.0508 mL	0.2541 mL	0.5083 mL	1.2707 mL
DMSO	60 mM	0.0424 mL	0.2118 mL	0.4236 mL	1.0590 mL
	80 mM	0.0318 mL	0.1588 mL	0.3177 mL	0.7942 mL
	100 mM	0.0254 mL	0.1271 mL	0.2541 mL	0.6354 mL

备注: 如您选择水作为储备液,请稀释至工作液后,再用 0.22 μ m 的滤膜过滤除菌后使用。