



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: **Pocapavir**
CAS 号: **146949-21-5**
产品货号: **S89151**

生物活性:

Description	Pocapavir (SCH-48973) 是一种具有口服活性的衣壳抑制剂, 能防止病毒粒子进入细胞后脱壳。 Pocapavir 具有抗脊髓灰质炎病毒活性。Pocapavir 也能抑制肠病毒 (enterovirus) 的感染。			
Cellular Effect	Cell Line	Type	Value	Description
	H1-HeLa	CC ₅₀	> 100 μ M	Cytotoxicity against human H1HeLa cells assessed as decrease in cell viability after 3 days by MTT assay
	HeLa	CC ₅₀	16 μ M	Cytotoxicity against human HeLa cells assessed as decrease in cell viability after 2 days by MTT assay
	HeLa	EC ₅₀	0.08 μ M	Antiviral activity against Human poliovirus 3 infected in human HeLa cells assessed as protection against virus induced cytopathic effect after 2 days by MTT assay
	LLC-MK2	EC ₅₀	0.003 μ M	Antiviral activity against Poliovirus P712 serotype PV2 vaccine-derived infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
	LLC-MK2	EC ₅₀	0.007 μ M	Antiviral activity against Poliovirus Lansing serotype PV2 infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
	LLC-MK2	EC ₅₀	0.008 μ M	Antiviral activity against Poliovirus 10693 serotype PV1 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
	LLC-MK2	EC ₅₀	0.008 μ M	Antiviral activity against Poliovirus 10695 serotype PV1 obtained from immunodeficient chronic excretor infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
	LLC-MK2	EC ₅₀	0.009 μ M	Antiviral activity against Poliovirus 10234 serotype PV2 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
	LLC-MK2	EC ₅₀	0.01 μ M	Antiviral activity against Poliovirus 10220 serotype PV2 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
	LLC-MK2	EC ₅₀	0.01 μ M	Antiviral activity against Poliovirus 10223 serotype PV1 obtained from immunodeficient chronic excretor infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
	LLC-MK2	EC ₅₀	0.011 μ M	Antiviral activity against Poliovirus 10237 serotype PV1 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced



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				cytopathic effect
LLC-MK2	EC ₅₀	0.014 μM		Antiviral activity against Poliovirus 10238 serotype PV1 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.014 μM		Antiviral activity against Poliovirus 10239 serotype PV1 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.014 μM		Antiviral activity against Poliovirus 10694 serotype PV1 obtained from immunodeficient chronic excretor infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.015 μM		Antiviral activity against Poliovirus 10222 serotype PV1 obtained from immunodeficient chronic excretor infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.015 μM		Antiviral activity against Poliovirus 10240 serotype PV1 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.016 μM		Antiviral activity against Poliovirus PV2-P712 serotype PV2 obtained from immunodeficient chronic excretor infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.017 μM		Antiviral activity against Poliovirus 10225 serotype PV1 obtained from immunodeficient chronic excretor infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.017 μM		Antiviral activity against Poliovirus 10242 serotype PV1 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.017 μM		Antiviral activity against Poliovirus PV1-LSc/2ab serotype PV1 vaccine-derived infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.018 μM		Antiviral activity against Poliovirus 10235 serotype PV1 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.018 μM		Antiviral activity against Poliovirus 10691 serotype PV1 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced



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				cytopathic effect
LLC-MK2	EC ₅₀	0.018 μM		Antiviral activity against Poliovirus Brunhilde serotype PV1 infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.019 μM		Antiviral activity against Poliovirus 10226 serotype PV2 obtained from immunodeficient chronic excretor infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.019 μM		Antiviral activity against Poliovirus 10227 serotype PV2 obtained from immunodeficient chronic excretor infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.019 μM		Antiviral activity against Poliovirus 10232 serotype PV2 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.02 μM		Antiviral activity against Poliovirus 10229 serotype PV2 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.02 μM		Antiviral activity against Poliovirus PV3-Leon serotype PV3 vaccine-derived infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.021 μM		Antiviral activity against Poliovirus 10668 serotype PV1 obtained from immunodeficient chronic excretor infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.023 μM		Antiviral activity against Poliovirus 10219 serotype PV2 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.024 μM		Antiviral activity against Poliovirus 10233 serotype PV2 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.026 μM		Antiviral activity against Poliovirus MEF-1 serotype PV2 infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.027 μM		Antiviral activity against Poliovirus 10221 serotype PV2 obtained from immunodeficient chronic excretor infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.028 μM		Antiviral activity against Poliovirus 10231 serotype PV2



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				obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.029 μM		Antiviral activity against Poliovirus 10236 serotype PV1 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.029 μM		Antiviral activity against Poliovirus 10690 serotype PV1 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.029 μM		Antiviral activity against Poliovirus 10692 serotype PV1 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.029 μM		Antiviral activity against Poliovirus 10805 serotype PV3 infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.036 μM		Antiviral activity against Poliovirus 10230 serotype PV2 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.038 μM		Antiviral activity against Poliovirus 10243 serotype PV2 obtained from immunodeficient chronic excretor infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.042 μM		Antiviral activity against Poliovirus 10689 serotype PV1 obtained from immunodeficient chronic excretor infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.042 μM		Antiviral activity against Poliovirus 10804 serotype PV3 obtained from immunodeficient chronic excretor infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.062 μM		Antiviral activity against Poliovirus Saukett serotype PV3 infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.069 μM		Antiviral activity against Poliovirus 10224 serotype PV1 obtained from immunodeficient chronic excretor infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
LLC-MK2	EC ₅₀	0.076 μM		Antiviral activity against Poliovirus Mahoney serotype PV1 infected in pig LLC-MK2 cells assessed as inhibition of



				viral-replication induced cytopathic effect Antiviral activity against Poliovirus 10241 serotype PV1 obtained from circulating vaccine infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
	LLC-MK2	EC ₅₀	0.083 μM	Antiviral activity against Poliovirus Leon serotype PV3 infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
	LLC-MK2	EC ₅₀	0.109 μM	Antiviral activity against Poliovirus 10228 serotype PV2 obtained from immunodeficient chronic excretor infected in pig LLC-MK2 cells assessed as inhibition of viral-replication induced cytopathic effect
In Vitro	Pocapavir belongs to a picornavirus antiviral mechanistic class called capsid inhibitors that block virus uncoating and viral RNA release into cells, which in turn prevents virus replication[2]。			
Solvent&Solubility	细胞实验: DMSO 中的溶解度 : 100 mg/mL (236.00 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)			
	Preparing Stock Solutions	Solvent / Mass Concentration	1 mg	5 mg
		1 mM	2.3600 mL	11.8002 mL
		5 mM	0.4720 mL	2.3600 mL
		10 mM	0.2360 mL	1.1800 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, 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。 动物实验: 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: ——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 方案 一 请依序添加每种溶剂: 10% DMSO → 40% PEG300 → 5% Tween-80 → 45% Saline Solubility: ≥ 2.5 mg/mL (5.90 mM); 澄清溶液 此方案可获得 ≥ 2.5 mg/mL (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; 再向上述体系中加入 50 μL Tween-80, 混合均匀; 然后再继续加入 450 μL 生理盐水 定容至 1 mL。 生理盐水的配制: 将 0.9 g 氯化钠, 溶解于 ddH ₂ O 并定容至 100 mL, 可以得到澄清透明的生理盐水溶液。 方案 二			



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	请依序添加每种溶剂: 10% DMSO → 90% Corn Oil Solubility: ≥ 2.5 mg/mL (5.90 mM); 澄清溶液 此方案可获得 ≥ 2.5 mg/mL (饱和度未知) 的澄清溶液, 此方案实验周期在半个月以上的动物实验酌情使用。 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。
参考文献	[1]. Collett MS, et al. Antiviral Activity of Pocopavir in a Randomized, Blinded, Placebo-Controlled Human Oral Poliovirus Vaccine Challenge Model. J Infect Dis. 2017 Feb 1;215(3):335-343.

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 , 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。

可选溶剂	质量 溶剂体积 浓度	1 mg	5 mg	10 mg	25 mg
DMSO	1 mM	2.3600 mL	11.8002 mL	23.6005 mL	59.0012 mL
	5 mM	0.4720 mL	2.3600 mL	4.7201 mL	11.8002 mL
	10 mM	0.2360 mL	1.1800 mL	2.3600 mL	5.9001 mL
	15 mM	0.1573 mL	0.7867 mL	1.5734 mL	3.9334 mL
	20 mM	0.1180 mL	0.5900 mL	1.1800 mL	2.9501 mL
	25 mM	0.0944 mL	0.4720 mL	0.9440 mL	2.3600 mL
	30 mM	0.0787 mL	0.3933 mL	0.7867 mL	1.9667 mL
	40 mM	0.0590 mL	0.2950 mL	0.5900 mL	1.4750 mL
	50 mM	0.0472 mL	0.2360 mL	0.4720 mL	1.1800 mL
	60 mM	0.0393 mL	0.1967 mL	0.3933 mL	0.9834 mL
	80 mM	0.0295 mL	0.1475 mL	0.2950 mL	0.7375 mL
	100 mM	0.0236 mL	0.1180 mL	0.2360 mL	0.5900 mL