



上海源叶生物科技有限公司
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产品名称: **UAMC00039 (dihydrochloride)**
CAS 号: **697797-51-6**
产品货号: **S86252**

生物活性:

Description	UAMC00039 dihydrochloride 是高效, 可逆, 竞争性的 dipeptidyl peptidase II 抑制剂, IC50 值为 0.48 nM。				
IC50 & Target	IC50: 0.48 nM (DPPII)[1]; Ki: 0.082 nM (DPPII)[2]				
In Vitro	UAMC00039 has an IC50 of 0.48 ± 0.04 nM and a high selectivity for DPPII compared to DPPIV (IC50=165 ± 9 μM) and DPP activity not caused by DPPII or DPPIV. UAMC00039 seems a promising tool to unravel the function of DPPII as well as to validate its potential as a therapeutic target[1]. The efficacy of a DPPII inhibitor in cell culture depends not only on the inhibitors’ potency towards the enzyme but also on its stability in the medium and its ability to enter the cell. UAMC00039 is stable for at least 48 h at 37 ° C in culture medium and in DPPII assay buffer. The compound is able to enter PBMC within 1 min resulting in a concentration-dependent inhibition of intracellular DPPII activity without affecting the ‘non-DPPII’ DPP activity. 1 and 100 μM UAMC00039 inhibits DPPII activity of PBMC and U937 cells more than 90%[2]。				
In Vivo	A dose dependent inhibition of DPPII but not of DPPIV is observed in the peripheral organs of both the rats and the mice (after oral administration) and the rabbits (after IV administration). UAMC00039 tested orally at 2 mg/kg does not cause signs of acute toxicity and does not cause any significant changes in the following functions that are evaluated: general behaviour, body temperature, respiration, bleeding time, blood pressure, urine volume, liver function, fasting glucose and gastrointestinal parameters like acidity, motility and irritation[1]。				
Solvent&Solubility	细胞实验: DMSO 中的溶解度 : ≥ 150 mg/mL (391.89 mM; 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 : 100 mg/mL (261.26 mM; 超声助溶) * "≥" means soluble, but saturation unknown				
	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
		1 mM	2.6126 mL	13.0630 mL	26.1260 mL
		5 mM	0.5225 mL	2.6126 mL	5.2252 mL
		10 mM	0.2613 mL	1.3063 mL	2.6126 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。 * 备注: 如您选择水作为储备液, 请稀释至工作液后, 再用 0.22 μm 的滤膜过滤除菌后使用。 动物实验: 以下溶解方案, 请直接配制工作液。建议现用现配, 在短期内尽快用完。 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: PBS Solubility: 100 mg/mL (261.26 mM); 澄清溶液; 超声助溶。				



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参考文献	[1]. Maes MB, et al. In vivo effects of a potent, selective DPPII inhibitor: UAMC00039 is a possible tool for the elucidation of the physiological function of DPPII. Adv Exp Med Biol. 2006;575:73-85. [2]. Maes MB, et al. Dipeptidyl peptidase II and leukocyte cell death. Biochem Pharmacol. 2006 Jun 28;72(1):70-9.
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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	2.6126 mL	13.0630 mL	26.1260 mL	65.3151 mL
	5 mM	0.5225 mL	2.6126 mL	5.2252 mL	13.0630 mL
	10 mM	0.2613 mL	1.3063 mL	2.6126 mL	6.5315 mL
	15 mM	0.1742 mL	0.8709 mL	1.7417 mL	4.3543 mL
	20 mM	0.1306 mL	0.6532 mL	1.3063 mL	3.2658 mL
	25 mM	0.1045 mL	0.5225 mL	1.0450 mL	2.6126 mL
	30 mM	0.0871 mL	0.4354 mL	0.8709 mL	2.1772 mL
	40 mM	0.0653 mL	0.3266 mL	0.6532 mL	1.6329 mL
	50 mM	0.0523 mL	0.2613 mL	0.5225 mL	1.3063 mL
	60 mM	0.0435 mL	0.2177 mL	0.4354 mL	1.0886 mL
	80 mM	0.0327 mL	0.1633 mL	0.3266 mL	0.8164 mL
	100 mM	0.0261 mL	0.1306 mL	0.2613 mL	0.6532 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 μm 的滤膜过滤除菌后使用。