



上海源叶生物科技有限公司
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产品名称: 5-羟甲基脱氧尿苷; 5-Hydroxymethyl-2'-deoxyuridine

CAS 号: 5116-24-5

产品货号: S89049

生物活性:

Description	5-Hydroxymethyl-2'-deoxyuridine 是核苷类似物。5-Hydroxymethyl-2'-deoxyuridine 抑制多种人类白血病细胞系的复制 IC50 值为 1.7-5.8 μ M。5-Hydroxymethyl-2'-deoxyuridine 延长了携带 L1210 白血病的小鼠的存活时间。5-Hydroxymethyl-2'-deoxyuridine 可用于细胞复制和白血病的研究。			
Cellular Effect	Cell Line	Type	Value	Description
	CEM-SS	CC ₅₀	120 μ M	Cytotoxicity against human CEM-SS cells by MTT assay
	CEM-SS	IC ₅₀	30 μ M	Antiviral activity against HIV1 LAI in human CEM-SS cells assessed as RT activity after 5 days by single passage assay
	L5178Y	IC ₅₀	0.002 μ M	In vitro growth inhibition of L5178Y-Parental murine leukemia cells
	L5178Y	IC ₅₀	11 μ M	In vitro growth inhibition of FdUrd resistant L5178Y-Resistant murine leukemia cells
	L5178Y	IC ₅₀	8.6 μ M	In vitro growth inhibition of L5178Y-Parental murine leukemia cells by incorporation of [14C]-Thd.
	MT4	CC ₅₀	130 μ M	Cytotoxicity against human MT4 cells by MTT assay
	MT4	IC ₅₀	> 130 μ M	Antiviral activity against HIV1 3B in human MT4 cells assessed as RT activity after 5 days by single passage assay
In Vitro	5-Hydroxymethyl-2'-deoxyuridine (0-10 μM) inhibits the replication of Sarcoma 180 cells and Ehrlich ascites carcinoma cells with ED50 values of 8.5 and 4 μM, respectively[1]. 5-Hydroxymethyl-2'-deoxyuridine inhibits herpes simplex virus type 1 (HSV-1) pyrimidine 2'-deoxyribonucleoside kinase with a Ki value of 3.5 μM[1]. 5-Hydroxymethyl-2'-deoxyuridine inhibits the replication of multiple human leukemia cell lines with IC50 values of 1.7-5.8 μM[2]. 5-Hydroxymethyl-2'-deoxyuridine (10-100 μM) shows dose-dependent toxicity against a human acute promyelocytic leukemia cell line[2].			
In Vivo	5-Hydroxymethyl-2'-deoxyuridine (0, 5 and 50 mg/kg; i.p.; once) increases the survival of DBA/2 mice carrying L1210 leukemia[3].			
Solvent&Solubility	细胞实验: DMSO 中的溶解度 : 116.67 mg/mL (451.81 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	3.8725 mL	19.3626 mL
		5 mM	0.7745 mL	3.8725 mL
		10 mM	0.3873 mL	1.9363 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 (protect from light)。-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。			



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参考文献

- [1]. Shiau GT, et al. Synthesis and biological activities of 5-(hydroxymethyl, azidomethyl, or aminomethyl)-2'-deoxyuridine and related 5'-substituted analogues. J Med Chem. 1980 Feb;23(2):127-33.
- [2]. Kahilainen LI, et al. 5-Hydroxymethyl-2'-deoxyuridine. Cytotoxicity and DNA incorporation studied by using a novel [2-14C]-derivative with normal and leukemic human hematopoietic cells. Acta Chem Scand B. 1985;39(6):477-84.
- [3]. JA Vilpo, et al. 5-Hydroxymethyl-2'-Deoxyuridine: Studies of Antileukemic Properties in Vitro and in Vivo. Nucleosides and Nucleotides . 1987.

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 (protect from light)。-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	1 mM	3.8725 mL	19.3626 mL	38.7252 mL	96.8129 mL
	5 mM	0.7745 mL	3.8725 mL	7.7450 mL	19.3626 mL
	10 mM	0.3873 mL	1.9363 mL	3.8725 mL	9.6813 mL
	15 mM	0.2582 mL	1.2908 mL	2.5817 mL	6.4542 mL
	20 mM	0.1936 mL	0.9681 mL	1.9363 mL	4.8406 mL
	25 mM	0.1549 mL	0.7745 mL	1.5490 mL	3.8725 mL
	30 mM	0.1291 mL	0.6454 mL	1.2908 mL	3.2271 mL
	40 mM	0.0968 mL	0.4841 mL	0.9681 mL	2.4203 mL
	50 mM	0.0775 mL	0.3873 mL	0.7745 mL	1.9363 mL
	60 mM	0.0645 mL	0.3227 mL	0.6454 mL	1.6135 mL
	80 mM	0.0484 mL	0.2420 mL	0.4841 mL	1.2102 mL
	100 mM	0.0387 mL	0.1936 mL	0.3873 mL	0.9681 mL