

产品名称: (D-ALA1)-PEPTIDE T AMIDE

产品别名: DAPTA; D-Ala-peptide T-amide; Adaptavir

生物活性:					
Description	DAPTA is a synthetic peptide, functions as a viral entry inhibitor by targeting selectively CCR5, and shows potent anti-HIV activities.				
IC₅₀ & Target	gp120 _{BaL} /sCD4-CCR5	gp120CM _{CM235} /sCD4-CCR5			
	55 pM (IC ₅₀ , in Cf2Th/synR5 cells)	0.32 nM (IC ₅₀ , in Cf2Th/synR5 cells)			
In Vitro	DAPTA (1 nM) inhibits HIV-1 replication in monocytes/macrophages (M/M) by >90%. DAPTA blocks HIV entry and prevents HIV-1 infection. DAPTA reduces CCR5 mAb binding in human primary macrophages. DAPTA potently blocks R5 gp120-mediated neuronal apoptosis. DAPTA is even more potent in preventing neuronal apoptosis than the CCR5 antagonist TAK-779 ^[1] . DAPTA potently inhibits specific CD4-dependent binding of gp120 BaL (IC ₅₀ = 0.06 nM) and CM235 (IC ₅₀ = 0.32 nM) to CCR5. DAPTA (1 nM) blocks formation of the gp120/sCD4 complex with CCR5. DAPTA inhibits the binding of gp120BaL/sCD4 to CCR5 (Cf2Th/synR5) cells with IC ₅₀ of 55 ± 0.08 pM ^[2] .				
Solvent&Solubility	In Vitro: H ₂ O : 50 mg/mL (58.35 mM; Need ultrasonic)				
		Solvent Mass Concentration	1 mg	5 mg	10 mg
	Preparing	1 mM	1.1670 mL	5.8351 mL	11.6702 mL
	Stock Solutions	5 mM	0.2334 mL	1.1670 mL	2.3340 mL
		10 mM	0.1167 mL	0.5835 mL	1.1670 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。-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。					
References	[1]. Pollicita M, et al. Profound anti-HIV-1 activity of DAPTA in monocytes/macrophages and inhibition of CCR5-mediated apoptosis in neuronal cells. <i>Antivir Chem Chemother.</i> 2007;18(5):285-95. [2]. Polianova MT, et al. Chemokine receptor-5 (CCR5) is a receptor for the HIV entry inhibitor peptide T (DAPTA). <i>Antiviral Res.</i> 2005 Aug;67(2):83-92.				
实验参考:					
Kinase Assay	A novel FITC-labeled tracer from soluble gp120 proteins (25 g/mL) is prepared using a Fluorescent protein labeling kit, according to the manufacture's instructions. Uncoupled FLUOS is removed by Sephadex G-10 column filtration. The molar ratio between FLUOS-labeling molecules and protein is from 3.5 to 4.5 fluorescence molecules per molecule of gp120. The concentration of fluorescent-labeled proteins is measured by Bradford assay and Western blotting by using calibrating amounts of soluble molecules with known concentration. Binding assays are performed in binding buffer, in final volume 100l. Binding is carried out for 1 h at 37°C in 96-well filter plates. Unbound-labeled proteins are removed by rapid vacuum filtration and washing using a 96-well plates manifold. Each binding mix is washed five times with 0.2 mL (total volume of 1.0 mL/well) cold washing buffer (50 mM HEPES, pH 7.4, 150 mM NaCl, 5 mM MgCl ₂ , 1 mM CaCl ₂). Filters are counted with a fluorescent plate reader at 495/530 nm. [2]				

References	<p>[1]. Pollicita M, et al. Profound anti-HIV-1 activity of DAPTA in monocytes/macrophages and inhibition of CCR5-mediated apoptosis in neuronal cells. <u>Antivir Chem Chemother.</u> 2007;18(5):285-95.</p> <p>[2]. Polianova MT, et al. Chemokine receptor-5 (CCR5) is a receptor for the HIV entry inhibitor peptide T (DAPTA). <u>Antiviral Res.</u> 2005 Aug;67(2):83-92.</p>
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源叶生物