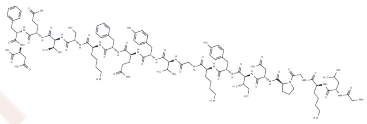
Data Sheet (Cat.No.T39863)

TargetMol

LCMV GP (61-80)

Chemical Properties



CAS No. : 232598-19-5

Formula: C108H160N24O31

Molecular Weight: 2290.57

Storage: Keep away from moisture,Keep away from direct sunlight
Store at -20°C
Actual storage temperature shall be subject to the COA.

Biological Description

Description	LCMV GP (61-80) is a 61-80 amino acid sequence peptide fragment derived from the lymphocytic choroid plexus meningitis virus (LCMV) glycoprotein (GP), which is a specific antigenic determinant that induces CD4+ T cell responses.
Targets(IC50)	Anti-infection,Others,Virus Protease
In vitro	Splenocytes from day 8 LCMV-infected mice were stimulated with LCMV GP (61-80) at 37 °C for 4 h. Intracellular cytokine staining showed that the peptide effectively induced IFN-γ production, demonstrating $CD4^+$ T cell activation[1].
In vivo	LCMV GP (61-80) acts as an immunodominant $CD4^+$ T cell epitope in LCMV Clone 13-infected mice. On day 8 post-infection, the frequency of GP61-80-specific $CD4^+$ T cells increased significantly, indicating strong in vivo immunogenicity[1].

Solubility Information

Solubility	H2O: < 0.1 mg/mL (insoluble),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.4366 mL	2.1829 mL	4.3657 mL
5 mM	0.0873 mL	0.4366 mL	0.8731 mL
10 mM	0.0437 mL	0.2183 mL	0.4366 mL
50 mM	0.0087 mL	0.0437 mL	0.0873 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Hilpert C, Sitte S, Matthies A, Voehringer D. Dendritic Cells Are Dispensable for T Cell Priming and Control of Acute Lymphocytic Choriomeningitis Virus Infection. J Immunol. 2016 Oct 1;197(7):2780-6.
Andargachew R, et, al. CD4 T Cell Affinity Diversity Is Equally Maintained during Acute and Chronic Infection. J Immunol. 2018 Jul 1; 201(1):19-30.
Homann D, et, al. Mapping and restriction of a dominant viral CD4+ T cell core epitope by both MHC class I and MHC class II. Virology. 2007 Jun 20; 363(1): 113-23.