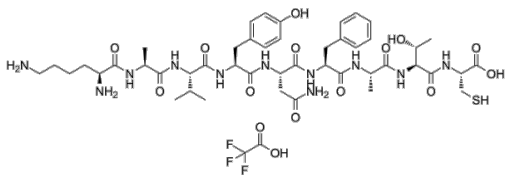
Product Data Sheet

Product Name: GP(33-41) TFA
Cat. No.: GC65488

Chemical Properties

Cas. No.			
Formula	C48H70F3N11O15S	M.Wt	1130.19
Solubility	Water : 1.82 mg/mL (1.61 mM; ultrasonic and adjust pH to 4 with HCl)	Storage	-20°C, away from moisture and light
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			



Background

GP(33-41) TFA, a 9-aa-long peptide, is the optimal sequence of the GP1 epitope of lymphocytic choriomeningitis virus. GP(33-41) TFA can upregulate H-2Db molecules at the RMA-S (Db Kb) cell surface with a SC50 of 344 nM[1].

GP(33-41) TFA sensitizes MC57 and T2-Db cells to lysis with ED50s of 0.9±0.6 and 2.5±0.7 nM[1]. The interaction between T cell receptors (TCR) and peptide-major histocompatibility complex

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(pMHC) antigens can lead to varying degrees of agonism (T cell activation), or antagonism. The P14 TCR recognises the lymphocytic choriomeningitis virus (LCMV)-derived peptide, GP(33-41) (KAVYNFATC), presents in the context of H-2D[2].

[1]. Gairin JE, et al. Optimal lymphocytic choriomeningitis virus sequences restricted by H-2Db major histocompatibility complex class I molecules and presented to cytotoxic T lymphocytes. J Virol. 1995 Apr;69(4):2297-305.
[2]. Boulter JM, et al. Potent T cell agonism mediated by a very rapid TCR/pMHC interaction. Eur J Immunol. 2007 Mar;37(3):798-806.

Caution: Product has not been fully validated for medical applications. For research use only.
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