

T-Select PEPTIDE

H-2K^b SeV Peptide FAPGNYPAL

Code No.	Quantity	Concentration
TS-M509-P	100 µL	10 mg/mL

For Research Use Only. Not for administration to humans, and not for diagnostic or therapeutic use.

Peptide Sequence: FAPGNYPAL (9 aa)

Origin: Sendai virus (SeV) nucleoprotein (NP, SV9),
324-332 aa

MHC Restriction: H-2K^b

Molecular Weight: 949.07 Da

Purity: ≥90%

Formulation: 10 mg/mL peptide solution in DMSO
Handle using aseptic techniques to avoid
contamination.

Storage Conditions

Store at -20°C. Repeated freeze-thaw cycles
should be avoided.

Background

T lymphocytes play a central role in the immune system. Major histocompatibility complex (MHC) is important for T cell recognition of surface antigen. In humans, MHC is also called human leukocyte antigen (HLA). MHCs present epitope peptides derived from both self and non-self protein, and these MHC/peptide complexes are recognized by T cells via their T-cell receptors (TCRs). In general, CD8⁺ cytotoxic T cells (CTLs) recognize the MHC class I/peptide complex and CD4⁺ helper T cells recognize MHC class II/peptide complex. Epitope peptides binding to class I molecules typically consist of approximately 8 to 10 consecutive amino acid residues. Meanwhile, epitope peptides binding to class II molecules are not constrained in size and can vary from 11 to 30 amino acids long.

T-Select PEPTIDE is a ready-to-use epitope peptide in liquid form and this peptide is used to produce MHC Tetramer reagent. Epitope peptides enable to stimulate CTLs in an antigen-specific manner, and also to induce T-helper immunity. Therefore, T-Select PEPTIDE series are available for T cell stimulation and expansion to examine T cell functions such as cytokine production, expression of cell surface marker, cytotoxic activity, etc.

Please refer to the data sheet of MHC Tetramer reagent which comprises this epitope peptide and H-2K^b (MBL, PN TS-M509-1) for more details.

H-2K^b SeV Tetramer

TS-M509-1 H-2K^b SeV Tetramer-FAPGNYPAL-PE

Mouse Strain H-2K Haplotypes

H-2K allele	H-2K ^b	H-2K ^d	H-2K ^k
Mouse strains	C57BL/-, BXSb/Mp, 129/-	BALB/c, DBA/2, NOD, B10.D2	C3H/He, AKR/J

References for This Epitope

- 1) Schumacher TN, *et al. Cell* **62**: 563-567 (1990)
- 2) Schumacher TN, *et al. Nature* **350**: 703-706 (1991)
- 3) Stevenson PG, *et al. PNAS* **95**: 15565-15570 (1998)
- 4) Usherwood EJ, *et al. J Virol* **73**: 7278-7286 (1999)
- 5) Masopust D, *et al. J Immunol* **172**: 4875-4882 (2004)

Related Products

Please check our web site (<https://ruo.mbl.co.jp>) for up-to-date information on products and custom MHC Tetramers.

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