

T-Select PEPTIDE

H-2L^d MuLV gp70 Peptide SPSYVYHQF

| Code No. | Quantity | Concentration |
|-----------|----------|---------------|
| TS-M521-P | 100 µL | 10 mg/mL |

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

Peptide Sequence: SPSYVYHQF (9 aa)

Origin: MuLV env gp70 (AH1), 423-431 aa

MHC Restriction: H-2L^d

Molecular Weight: 1,127.22 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-2L^d (MBL, PN TS-M521-1) for more details.

H-2L^d MuLV gp70 Tetramers

TS-M521-1 H-2L^d MuLV gp70 Tetramer-SPSYVYHQF-PE
TS-M521-2 H-2L^d MuLV gp70 Tetramer-SPSYVYHQF-APC

References for This Epitope

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- 2) Luznik L, *et al. Blood* **101**: 1645–1652 (2003)
- 3) Rosato A, *et al. Cancer Res* **63**: 2158–2163 (2003)
- 4) Bronte V, *et al. J Immunol* **171**: 6396–6405 (2003)
- 5) Schirmbeck R, *et al. J Immunol* **177**: 1534–1542 (2006)
- 6) Yoshimura K, *et al. Cancer Res* **66**: 1096–1104 (2006)
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- 8) Jordan KR, *et al. J Immunol* **180**: 188–197 (2008)
- 9) Kemmler CB, *et al. J Immunol* **187**: 4431–4439 (2011)
- 10) Buhrman JD, *et al. Cancer Res* **73**: 74–85 (2013)

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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