

T-Select PEPTIDE

# Human CLIP<sub>103-117</sub> Peptide

## PVSKMRMATPLLMQA

| Code No.  | Quantity | Concentration |
|-----------|----------|---------------|
| TS-M801-P | 100 µL   | 10 mg/mL      |

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

**Peptide Sequence:** PVSKMRMATPLLMQA (15 aa)

**Origin:** Human class II associated Invariant chain peptide  
CLIP 103-117 aa

**Molecular Weight:** 1,674.11 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<sup>+</sup> cytotoxic T cells (CTLs) recognize the MHC class I/peptide complex and CD4<sup>+</sup> 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.

### Human CLIP<sub>103-117</sub> Tetramers

TS-M801-1 HLA-DRB1\*01:01 human CLIP<sub>103-117</sub> Tetramer-PE  
TS-M801-2 HLA-DRB1\*01:01 human CLIP<sub>103-117</sub> Tetramer-APC  
TS-M805-1 HLA-DRB1\*04:05 human CLIP<sub>103-117</sub> Tetramer-PE  
TS-M805-2 HLA-DRB1\*04:05 human CLIP<sub>103-117</sub> Tetramer-APC  
TS-M807-1 HLA-DRB1\*11:01 human CLIP<sub>103-117</sub> Tetramer-PE  
TS-M807-2 HLA-DRB1\*11:01 human CLIP<sub>103-117</sub> Tetramer-APC  
TS-M809-1 HLA-DRB1\*04:01 human CLIP<sub>103-117</sub> Tetramer-PE  
TS-M809-2 HLA-DRB1\*04:01 human CLIP<sub>103-117</sub> Tetramer-APC  
TS-M816-1 HLA-DRB1\*15:01 human CLIP<sub>103-117</sub> Tetramer-PE  
TS-M816-2 HLA-DRB1\*15:01 human CLIP<sub>103-117</sub> Tetramer-APC  
TS-M817-1 HLA-DRB1\*15:02 human CLIP<sub>103-117</sub> Tetramer-PE  
TS-M817-2 HLA-DRB1\*15:02 human CLIP<sub>103-117</sub> Tetramer-APC  
TS-M715-1 I-A<sup>b</sup> human CLIP<sub>103-117</sub> Tetramer-PE  
TS-M715-2 I-A<sup>b</sup> human CLIP<sub>103-117</sub> Tetramer-APC  
TS-M720-1 I-A<sup>d</sup> human CLIP<sub>103-117</sub> Tetramer-PE  
TS-M720-2 I-A<sup>d</sup> human CLIP<sub>103-117</sub> Tetramer-APC  
TS-M717-1 I-A<sup>g7</sup> human CLIP<sub>103-117</sub> Tetramer-PE  
TS-M717-2 I-A<sup>g7</sup> human CLIP<sub>103-117</sub> Tetramer-APC

### References for This Product

- 1) Paul A, *et al. Nature* **345**: 615-618 (1990)
- 2) Victor S, *et al. Nature* **375**: 802-806 (1995)
- 3) Sebastian A, *et al. J Exp Med* **181**: 1729-1741 (1995)
- 4) Lisa K, *et al. J Cell* **82**: 155-165 (1995)
- 5) Felix B, *et al. PNAS* **98**: 12168-12173 (2001)
- 6) Cheryl LD, *et al. J Clin Invest* **112**: 831-842 (2003)
- 7) Gerald TN, *et al. J Immunol* **188**: 2477-2482 (2012)

### 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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