

T-Select PEPTIDE

# HLA-DRB1\*01:01 HTLV-1 Tax<sub>155-167</sub>

## Peptide YLYQLSPPIWPL

Code No.	Quantity	Concentration
TS-M815-P	100 µL	10 mg/mL

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

**Peptide Sequence:** YLYQLSPPIWPL (13 aa)

**Origin:** Human T-lymphotropic virus 1 (HTLV-1)  
Tax protein 155-167 aa

**HLA Restriction:** HLA-DRB1\*01:01

**Molecular Weight:** 1,591 Da

**Purity:** ≥95%

**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.

Please refer to the data sheet of MHC Tetramer reagent which comprises this epitope peptide and HLA-DRB1\*01:01 (MBL, PN TS-M815-1) for more details.

### HLA-DRB1\*01:01 HTLV-1 Tax<sub>155-167</sub> Tetramers

TS-M815-1 HLA-DRB1\*01:01 HTLV-1 Tax<sub>155-167</sub> Tetramer-PE  
TS-M815-2 HLA-DRB1\*01:01 HTLV-1 Tax<sub>155-167</sub> Tetramer-APC

### References for This Product

- 1) Jacobson S, *et al. J Immunol* **146**: 1155-1162 (1991)
- 2) Kannagi M, *et al. J Virol* **66**:2928-2933 (1992)
- 3) Greten FT, *et al. PNAS* **95**: 7568-7573 (1998)
- 4) Harashima N, *et al. Cancer Res* **64**(1):391-399 (2004)
- 5) Goon PK, *et al. J Immunol* **172**: 1735-1743 (2004)
- 6) Harashima N, *et al. J Virol* **79**(15):10088-10092 (2005)
- 7) Tamai Y, *et al. J Immunol* **190**: 4382-4392 (2013)

### Related Products

#### T-Select Human class II Tetramers

TS-M815-1 HLA-DRB1\*01:01 HTLV-1 Tax<sub>155-167</sub> Tetramer-PE  
TS-M815-2 HLA-DRB1\*01:01 HTLV-1 Tax<sub>155-167</sub> Tetramer-APC  
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-M802-1 HLA-DRB1\*01:01 HIV gag<sub>295-307</sub> Tetramer-PE  
TS-M802-2 HLA-DRB1\*01:01 HIV gag<sub>295-307</sub> Tetramer-APC  
TS-M803-1 HLA-DRB1\*01:01 EBV EBNA1<sub>515-527</sub> Tetramer-PE  
TS-M803-2 HLA-DRB1\*01:01 EBV EBNA1<sub>515-527</sub> Tetramer-APC  
TS-M804-1 HLA-DRB1\*01:01 Influenza HA<sub>306-318</sub> Tetramer-PE  
TS-M804-2 HLA-DRB1\*01:01 Influenza HA<sub>306-318</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-M806-1 HLA-DRB1\*04:05 Influenza HA<sub>306-318</sub> Tetramer-PE  
TS-M806-2 HLA-DRB1\*04:05 Influenza HA<sub>306-318</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-M808-1 HLA-DRB1\*11:01 Influenza HA<sub>306-318</sub> Tetramer-PE  
TS-M808-2 HLA-DRB1\*11:01 Influenza HA<sub>306-318</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-M810-1 HLA-DRB1\*04:01 Influenza HA<sub>306-318</sub> Tetramer-PE  
TS-M810-2 HLA-DRB1\*04:01 Influenza HA<sub>306-318</sub> Tetramer-APC

### T-Select Mouse class II Tetramers

TS-M704-1 I-A<sup>b</sup> MOG<sub>35-55</sub> Tetramer-PE  
TS-M704-2 I-A<sup>b</sup> MOG<sub>35-55</sub> Tetramer-APC  
TS-M705-1 I-A<sup>b</sup> FMLV<sub>123-141</sub> Tetramer-PE  
TS-M706-1 I-A<sup>b</sup> E $\alpha$ <sub>52-68</sub> Tetramer-PE  
TS-M707-1 I-A<sup>b</sup> ESAT-6<sub>1-20</sub> Tetramer-PE  
TS-M710-1 I-A<sup>b</sup> OVA<sub>323-339</sub> Tetramer-PE  
TS-M710-2 I-A<sup>b</sup> OVA<sub>323-339</sub> Tetramer-APC

### T-Select Peptides

TS-M815-P HLA-DRB1\*01:01 HTLV-1 Tax<sub>155-167</sub> peptide  
TS-M701-P I-A<sup>b</sup> HBc helper peptide  
TS-M702-P I-A<sup>d</sup> Tetanus toxin p30 helper peptide  
TS-M703-P I-A<sup>d</sup> OVA<sub>323-339</sub> helper peptide  
TS-M704-P I-A<sup>b</sup> MOG<sub>35-55</sub> peptide  
TS-M707-P I-A<sup>b</sup> ESAT-6<sub>1-20</sub> peptide  
TS-M708-P I-A<sup>k</sup> HEL peptide  
TS-M801-P HLA-DRB1\*01:01 human CLIP<sub>103-117</sub> peptide  
TS-M802-P HLA-DRB1\*01:01 HIV gag<sub>295-307</sub> peptide  
TS-M803-P HLA-DRB1\*01:01 EBV EBNA1<sub>515-527</sub> peptide  
TS-M804-P HLA-DRB1\*01:01 Influenza HA<sub>306-318</sub> peptide

### T-Select Human Class I Tetramers

#### HTLV-1 Tetramers (Human)

TS-M017-1 HLA-A\*02:01 HTLV-1 Tax<sub>11-19</sub> Tetramer-PE  
TS-M019-1 HLA-A\*02:01 HTLV-1 Tax<sub>178-186</sub> Tetramer-PE  
TS-M020-1 HLA-A\*24:02 HTLV-1 Tax<sub>12-20</sub> Tetramer-PE  
TS-M021-1 HLA-A\*24:02 HTLV-1 Tax<sub>187-195</sub> Tetramer-PE  
TS-M018-1 HLA-A\*24:02 HTLV-1 Tax<sub>301-309</sub> Tetramer-PE  
TS-M022-1 HLA-A\*24:02 HTLV-1 Env<sub>11-19</sub> Tetramer-PE  
TS-M023-1 HLA-A\*11:01 HTLV-1 Tax<sub>88-96</sub> Tetramer-PE  
TS-M024-1 HLA-A\*11:01 HTLV-1 Tax<sub>272-280</sub> Tetramer-PE

#### Virus

TS-M012-1 HLA-A\*11:01 CMV pp65 Tetramer-ATVQGGNKLK-PE  
TS-0010-1C HLA-A\*02:01 CMV pp65 Tetramer-NLVPMTATV-PE  
TS-0020-1C HLA-A\*24:02 CMV pp65 Tetramer-QYDPAALF-PE  
TS-M013-1 HLA-B\*15:01 CMV pp65 Tetramer-KMQVIGDQY-PE  
TS-0027-1C HLA-B\*35:01 CMV pp65 Tetramer-IPSINVVHHY-PE  
TS-0025-1C HLA-B\*07:02 CMV pp65 Tetramer-TPRVGTGGGAM-PE  
TS-M099-1 HLA-B\*07:02 CMV pp65 Tetramer-RPHERNGFTVL-PE  
TS-0024-1C HLA-A\*01:01 CMV pp50 Tetramer-VTEHDTLLY-PE  
TS-M057-1 HLA-A\*02:01 CMV IE1 Tetramer-VLEETSVML-PE  
TS-M100-1 HLA-A\*03:01 CMV IE1 Tetramer-KLGGALQAK-PE  
TS-0026-1C HLA-B\*08:01 CMV IE1 Tetramer-ELRRKMMYM-PE  
TS-0011-1C HLA-A\*02:01 EBV BMLF1 Tetramer-GLCTLVAML-PE  
TS-M003-1 HLA-A\*24:02 EBV BMLF1 Tetramer-DYNFVKQLF-PE  
TS-M006-1 HLA-A\*02:01 EBV LMP1 Tetramer-YLQQNWWTL-PE  
TS-M030-1 HLA-A\*02:01 EBV LMP2 Tetramer-TVCGGIMFL-PE  
TS-M031-1 HLA-A\*02:01 EBV LMP2 Tetramer-LLWTLVLL-PE  
TS-M069-1 HLA-A\*02:01 EBV LMP2 Tetramer-FLYALALLL-PE  
TS-M032-1 HLA-A\*02:01 EBV LMP2 Tetramer-CLGGLLTMV-PE  
TS-M034-1 HLA-A\*24:02 EBV LMP2 Tetramer-PYLFWLAAL-PE  
TS-M001-1 HLA-A\*24:02 EBV LMP2 Tetramer-IYVLVMLVL-PE  
TS-M035-1 HLA-A\*24:02 EBV LMP2 Tetramer-TYGPVFMSL-PE  
TS-M111-1 HLA-A\*11:01 EBV LMP2 Tetramer-SSCSCPLSK-PE  
TS-M135-1 HLA-A\*11:01 EBV LMP2 S9T Tetramer-SSCSCPLTK-PE  
TS-M038-1 HLA-B\*35:01 EBV LMP2 Tetramer-MGSLEMVPM-PE  
TS-M002-1 HLA-A\*24:02 EBV BRLF1 Tetramer-TYPVLEEMF-PE  
TS-M004-1 HLA-A\*24:02 EBV EBNA3A Tetramer-RYSIFFDYM-PE  
TS-M005-1 HLA-A\*24:02 EBV EBNA3B Tetramer-TYSAGIVQI-PE  
TS-M028-1 HLA-A\*11:01 EBV EBNA3B<sub>399-408</sub> Tetramer-PE  
TS-M029-1 HLA-A\*11:01 EBV EBNA3B<sub>416-424</sub> Tetramer-PE  
TS-M036-1 HLA-A\*08:01 EBV BZLF1 Tetramer-RAKFKQLL-PE  
TS-M037-1 HLA-B\*35:01 EBV BZLF1 Tetramer-EPLPQQQLTAY-PE  
TS-M009-1 HLA-A\*24:02 EBV Mix Tetramer-PE  
TS-M027-1 HLA-A\*02:01 HIV gag Tetramer-SLYNTVATL-PE  
TS-0008-1C HLA-A\*02:01 HIV pol Tetramer-ILKEPVHGV-PE  
TS-M007-1 HLA-A\*24:02 HIV env Tetramer-RYLDRDQQLL-PE  
TS-M054-1 HLA-B\*07:02 HIV nef Tetramer-TPGPGVRYPL-PE

TS-M106-1 HLA-B\*35:01 HIV nef Tetramer-VPLRPMTY-PE  
TS-M055-1 HLA-B\*35:01 HIV RT Tetramer-NPDIIVYQY-PE  
TS-0018-1C HLA-A\*02:01 HBV core Tetramer-FLPDSFFPSV-PE  
TS-0022-1C HLA-A\*24:02 HBV core Tetramer-EYLVSFQVW-PE  
TS-0023-1C HLA-A\*24:02 HBV pol Tetramer-KYTSFPWLL-PE  
TS-M058-1 HLA-A\*02:01 Adv Hexon<sub>913-921</sub> Tetramer-YLLFEVFDV-PE  
TS-M059-1 HLA-A\*02:01 Adv Hexon<sub>914-922</sub> Tetramer-LLFEVFDVV-PE  
TS-M061-1 HLA-A\*02:01 Adv Hexon<sub>917-925</sub> Tetramer-YVLFVFDV-PE  
TS-M062-1 HLA-A\*24:02 Adv Hexon<sub>37-45</sub> Tetramer-TYFNLGNKF-PE  
TS-M063-1 HLA-A\*24:02 Adv Hexon<sub>37-45</sub> Tetramer-TYFSLNKNF-PE  
TS-M064-1 HLA-A\*24:02 Adv Hexon<sub>696-704</sub> Tetramer-VYSGSIPYL-PE  
TS-M065-1 HLA-B\*07:02 Adv Hexon<sub>114-124</sub> Tetramer-KPYSGTAYNSL-PE  
TS-M066-1 HLA-B\*07:02 Adv Hexon<sub>114-124</sub> Tetramer-KPYSGTAYNAL-PE  
TS-M067-1 HLA-B\*35:01 Adv Hexon<sub>320-329</sub> Tetramer-MPNRPNYIAF-PE  
TS-M068-1 HLA-B\*35:01 Adv Hexon<sub>705-713</sub> Tetramer-IPYLDGTFY-PE  
TS-M045-1 HLA-A\*01:01 Influenza NP Tetramer-CTELKLSDY-PE  
TS-M045-2 HLA-A\*01:01 Influenza NP Tetramer-CTELKLSDY-APC  
TS-M046-1 HLA-B\*35:01 Influenza NP Tetramer-LPFEKSTVM-PE  
TS-M046-2 HLA-B\*35:01 Influenza NP Tetramer-LPFEKSTVM-APC  
TS-0012-1C HLA-A\*02:01 Influenza M1 Tetramer-GILGFVFTL-PE  
TS-0012-2C HLA-A\*02:01 Influenza M1 Tetramer-GILGFVFTL-APC  
TS-0031-1 HLA-A\*02:01 HPV E7 Tetramer-YMLDLQPET-PE  
TS-M122-1 HLA-A\*02:01 VZV IE62 Tetramer-ALWALPHAA-PE

### Control

TS-M007-1 HLA-A\*24:02 Negative Tetramer-RYLDRDQQLL-PE  
TS-M007-2 HLA-A\*24:02 Negative Tetramer-RYLDRDQQLL-APC  
TS-M007-3 HLA-A\*24:02 Negative Tetramer-RYLDRDQQLL-FITC  
TS-0029-1C HLA-A\*02:01 Negative Tetramer-PE  
TS-0029-2C HLA-A\*02:01 Negative Tetramer-APC

### Others

TS-HCD-1 Human CD1d Tetramer-PE  
TS-HCD-2 Human CD1d Tetramer-APC

### Kit

AM-1005 IMMUNOCYTO Cytotoxicity Detection Kit  
4844 IMMUNOCYTO CD107a Detection Kit  
8223 IMMUNOCYTO IFN- $\gamma$  ELISPOT Kit

### Others

A07750 Anti-CD4 (Human) mAb-FITC  
A07704 7-AAD Viability Dye  
MTG-001 Clear Back (Human FcR blocking reagent)

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