

T-Select PEPTIDE

Human CLIP₁₀₃₋₁₁₇ 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 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⁺ 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.

HLA-DRB1*01:01 human CLIP₁₀₃₋₁₁₇ Tetramers

TS-M801-1 HLA-DRB1*01:01 human CLIP₁₀₃₋₁₁₇ Tetramer-PE
TS-M805-1 HLA-DRB1*04:05 human CLIP₁₀₃₋₁₁₇ Tetramer-PE
TS-M807-1 HLA-DRB1*11:01 human CLIP₁₀₃₋₁₁₇ Tetramer-PE
TS-M809-1 HLA-DRB1*04:01 human CLIP₁₀₃₋₁₁₇ Tetramer-PE

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

T-Select Human class II Tetramers

TS-M801-1 HLA-DRB1*01:01 human CLIP₁₀₃₋₁₁₇ Tetramer-PE
TS-M801-2 HLA-DRB1*01:01 human CLIP₁₀₃₋₁₁₇ Tetramer-APC
TS-M802-1 HLA-DRB1*01:01 HIV gag₂₉₅₋₃₀₇ Tetramer-PE
TS-M802-2 HLA-DRB1*01:01 HIV gag₂₉₅₋₃₀₇ Tetramer-APC
TS-M803-1 HLA-DRB1*01:01 EBV EBNA1₅₁₅₋₅₂₇ Tetramer-PE
TS-M803-2 HLA-DRB1*01:01 EBV EBNA1₅₁₅₋₅₂₇ Tetramer-APC
TS-M804-1 HLA-DRB1*01:01 Influenza HA₃₀₆₋₃₁₈ Tetramer-PE
TS-M804-2 HLA-DRB1*01:01 Influenza HA₃₀₆₋₃₁₈ Tetramer-APC
TS-M805-1 HLA-DRB1*04:05 human CLIP₁₀₃₋₁₁₇ Tetramer-PE
TS-M805-2 HLA-DRB1*04:05 human CLIP₁₀₃₋₁₁₇ Tetramer-APC
TS-M806-1 HLA-DRB1*04:05 Influenza HA₃₀₆₋₃₁₈ Tetramer-PE
TS-M806-2 HLA-DRB1*04:05 Influenza HA₃₀₆₋₃₁₈ Tetramer-APC
TS-M807-1 HLA-DRB1*11:01 human CLIP₁₀₃₋₁₁₇ Tetramer-PE
TS-M807-2 HLA-DRB1*11:01 human CLIP₁₀₃₋₁₁₇ Tetramer-APC
TS-M808-1 HLA-DRB1*11:01 Influenza HA₃₀₆₋₃₁₈ Tetramer-PE
TS-M808-2 HLA-DRB1*11:01 Influenza HA₃₀₆₋₃₁₈ Tetramer-APC
TS-M809-1 HLA-DRB1*04:01 human CLIP₁₀₃₋₁₁₇ Tetramer-PE
TS-M809-2 HLA-DRB1*04:01 human CLIP₁₀₃₋₁₁₇ Tetramer-APC
TS-M810-1 HLA-DRB1*04:01 Influenza HA₃₀₆₋₃₁₈ Tetramer-PE
TS-M810-2 HLA-DRB1*04:01 Influenza HA₃₀₆₋₃₁₈ Tetramer-APC
TS-M815-1 HLA-DRB1*01:01 HTLV-1 Tax₁₅₅₋₁₆₇ Tetramer-PE
TS-M815-2 HLA-DRB1*01:01 HTLV-1 Tax₁₅₅₋₁₆₇ Tetramer-APC

T-Select Mouse class II Tetramers

TS-M704-1 I-A^b MOG₃₅₋₅₅ Tetramer-PE
TS-M704-2 I-A^b MOG₃₅₋₅₅ Tetramer-APC
TS-M705-1 I-A^b FMLV₁₂₃₋₁₄₁ Tetramer-PE
TS-M706-1 I-A^b E_{α52-68} Tetramer-PE
TS-M707-1 I-A^b ESAT-6₁₋₂₀ Tetramer-PE
TS-M710-1 I-A^b OVA₃₂₃₋₃₃₉ Tetramer-PE
TS-M710-2 I-A^b OVA₃₂₃₋₃₃₉ Tetramer-APC

T-Select Peptides

TS-M801-P Human CLIP₁₀₃₋₁₁₇ peptide
TS-M701-P I-A^b HBc helper peptide
TS-M702-P I-A^d Tetanus toxin p30 helper peptide
TS-M703-P I-A^b/I-A^d OVA₃₂₃₋₃₃₉ helper peptide
TS-M704-P I-A^b MOG₃₅₋₅₅ peptide
TS-M707-P I-A^b ESAT-6₁₋₂₀ peptide
TS-M708-P I-A^k HEL peptide
TS-M802-P HLA-DRB1*01:01 HIV gag₂₉₅₋₃₀₇ peptide
TS-M803-P HLA-DRB1*01:01 EBV EBNA1₅₁₅₋₅₂₇ peptide
TS-M804-P Influenza HA₃₀₆₋₃₁₈ peptide
TS-M815-P HLA-DRB1*01:01 HTLV-1 Tax₁₅₅₋₁₆₇ peptide

T-Select Human Class I Tetramers

Influenza Tetramers (Human)

TS-M045-1 HLA-A*01:01 Influenza NP Tetramer-CTELKLSDDY-PE
TS-M045-2 HLA-A*01:01 Influenza NP Tetramer-CTELKLSDDY-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

Influenza Tetramers (Mouse)

TS-M502-1 H-2D^b Influenza NP Tetramer-ASNENMDTM-PE
TS-M502-2 H-2D^b Influenza NP Tetramer-ASNENMDTM-APC
TS-M508-1 H-2D^b Influenza NP Tetramer-ASNENMETM-PE
TS-M508-2 H-2D^b Influenza NP Tetramer-ASNENMETM-APC
TS-M527-1 H-2D^b Influenza NP Tetramer-ASNENMDAM-PE
TS-M527-2 H-2D^b Influenza NP Tetramer-ASNENMDAM-APC
TS-M528-1 H-2D^b Influenza PA Tetramer-SLENFRAYV-PE
TS-M528-2 H-2D^b Influenza PA Tetramer-SLENFRAYV-APC
TS-M533-1 H-2K^b Influenza PB1 Tetramer-SSYRRPVGI-PE
TS-M533-2 H-2K^b Influenza PB1 Tetramer-SSYRRPVGI-APC
TS-M520-1 H-2K^d Influenza HA Tetramer-IYSTVASSL-PE
TS-M520-2 H-2K^d Influenza HA Tetramer-IYSTVASSL-APC
TS-M535-1 H-2K^d Influenza HA Tetramer-LYQNVGTYV-PE
TS-M535-2 H-2K^d Influenza HA Tetramer-LYQNVGTYV-APC
TS-M534-1 H-2K^d Influenza NP Tetramer-TYQRTRALV-PE
TS-M534-2 H-2K^d Influenza NP Tetramer-TYQRTRALV-APC

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-QYDPVAALF-PE
TS-M013-1 HLA-B*15:01 CMV pp65 Tetramer-KMQVIGDQY-PE
TS-0027-1C HLA-B*35:01 CMV pp65 Tetramer-IPSINVHHY-PE
TS-0025-1C HLA-B*07:02 CMV pp65 Tetramer-TPRVTTGGGAM-PE
TS-M099-1 HLA-B*07:02 CMV pp65 Tetramer-RPHERNGFTVL-PE
TS-0024-1C HLA-A*01:01 CMV pp50 Tetramer-VTEHDITLLY-PE
TS-M057-1 HLA-A*02:01 CMV IE1 Tetramer-VLEETSVM-PE
TS-M100-1 HLA-A*03:01 CMV IE1 Tetramer-KLGGALQAK-PE
TS-0026-1C HLA-B*08:01 CMV IE1 Tetramer-ELRRKMMY-PE
TS-M017-1 HLA-A*02:01 HTLV-1 Tax₁₁₋₁₉ Tetramer-PE
TS-M019-1 HLA-A*02:01 HTLV-1 Tax₁₇₈₋₁₈₆ Tetramer-PE
TS-M020-1 HLA-A*24:02 HTLV-1 Tax₁₂₋₂₀ Tetramer-PE
TS-M021-1 HLA-A*24:02 HTLV-1 Tax₁₈₇₋₁₉₅ Tetramer-PE
TS-M018-1 HLA-A*24:02 HTLV-1 Tax₃₀₁₋₃₀₉ Tetramer-PE
TS-M022-1 HLA-A*24:02 HTLV-1 Env₁₁₋₁₉ Tetramer-PE
TS-M023-1 HLA-A*11:01 HTLV-1 Tax₈₈₋₉₆ Tetramer-PE
TS-M024-1 HLA-A*11:01 HTLV-1 Tax₂₇₂₋₂₈₀ Tetramer-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-TYGPVFMFL-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 EBNA3B₃₉₉₋₄₀₈ Tetramer-PE
TS-M029-1 HLA-A*11:01 EBV EBNA3B₄₁₆₋₄₂₄ 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-NPDIVIQY-PE
TS-0018-1C HLA-A*02:01 HBV core Tetramer-FLPSPDFPVS-PE
TS-0022-1C HLA-A*24:02 HBV core Tetramer-EYLVSFGVW-PE
TS-0023-1C HLA-A*24:02 HBV pol Tetramer-KYTSFPWLL-PE
TS-M058-1 HLA-A*02:01 Adv Hexon₉₁₃₋₉₂₁ Tetramer-YLLFEVFDV-PE
TS-M059-1 HLA-A*02:01 Adv Hexon₉₁₄₋₉₂₂ Tetramer-LLFEVFDVV-PE
TS-M061-1 HLA-A*02:01 Adv Hexon₉₁₇₋₉₂₅ Tetramer-YVLFVFDV-PE
TS-M062-1 HLA-A*24:02 Adv Hexon₃₇₋₄₅ Tetramer-TYFNLGNKF-PE
TS-M063-1 HLA-A*24:02 Adv Hexon₃₇₋₄₅ Tetramer-TYFSLNKNF-PE
TS-M064-1 HLA-A*24:02 Adv Hexon₆₉₆₋₇₀₄ Tetramer-VYSGSIPYL-PE
TS-M065-1 HLA-B*07:02 Adv Hexon₁₁₄₋₁₂₄ Tetramer-KPYSGTAYNSL-PE
TS-M066-1 HLA-B*07:02 Adv Hexon₁₁₄₋₁₂₄ Tetramer-KPYSGTAYNAL-PE
TS-M067-1 HLA-B*35:01 Adv Hexon₃₂₀₋₃₂₉ Tetramer-MPNRPNYIAF-PE
TS-M068-1 HLA-B*35:01 Adv Hexon₇₀₅₋₇₁₃ Tetramer-IPYLDGTFY-PE
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-1005M IMMUNOCYTO Cytotoxicity Detection Kit
4844 IMMUNOCYTO CD107a Detection 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.