

T-Select PEPTIDE

HLA-A*02:01 Influenza M1

Peptide

GILGFVFTL

Code No.
TS-0012-P

Quantity
100 µL

Concentration
10 mg/mL

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

Peptide Sequence: GILGFVFTL (9 aa)

functions such as cytokine production, expression of cell surface marker, cytotoxic activity, etc.

Origin: Influenza A/X31 (H3N2),
Influenza A/Puerto Rico/8/1934 (PR8, H1N1)
Matrix protein 1 (M1), 58-66 aa

Please refer to the data sheet of MHC Tetramer reagent which comprises this epitope peptide and HLA-A*02:01 (MBL, PN TS-0012-1C) for more details.

HLA Restriction: HLA-A*02:01

Molecular Weight: 966 Da

Purity: ≥98%

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

HLA-A*02:01 Influenza M1 Tetramers

TS-0012-1C HLA-A*02:01 Influenza M1 Tetramer-GILGFVFTL-PE
TS-0012-2C HLA-A*02:01 Influenza M1 Tetramer-GILGFVFTL-APC
TB-0012-4 HLA-A*02:01 Influenza M1 Tetramer-GILGFVFTL-BV421
TS-M162-1 HLA-A*02:01 Influenza M1₅₉₋₆₈ Tetramer-ILGFVFTLTV-PE
TS-M162-2 HLA-A*02:01 Influenza M1₅₉₋₆₈ Tetramer-ILGFVFTLTV-APC

Storage Conditions

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

References for This Epitope

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- 19) Walker EB, *et al. Clin Cancer Res* **14**: 5270-5283 (2008)
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- 24) Harari A, *et al. J Virol* **83**: 2862-2871 (2009)
- 25) Alanio C, *et al. Blood* **115**: 3718-3725 (2010)
- 26) Cellerai C, *et al. J Virol* **84**: 3868-3878 (2010)
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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

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Related Products

MHC Class I Influenza Tetramers for Human

| | |
|------------|--|
| TS-M045-1 | HLA-A*01:01 Influenza NP Tetramer-CTELKLSDY-PE |
| TS-0012-1C | HLA-A*02:01 Influenza M1 Tetramer-GILGFVFTL-PE |
| TS-M162-1 | HLA-A*02:01 Influenza M1 ₅₉₋₆₈ Tetramer-ILGFVFTLTV-PE |
| TS-M163-1 | HLA-A*02:01 Influenza NS1 ₁₂₂₋₁₃₀ Tetramer-AIMDKNIL-PE |
| TB-0103-1 | HLA-A*03:01 Influenza NP Tetramer-ILRGSAVHK-PE |
| TS-M144-1 | HLA-A*24:02 Influenza PA ₁₃₀₋₁₃₈ Tetramer-YYLEKANKI-PE |
| TS-M145-1 | HLA-A*24:02 Influenza PB1 ₂₁₆₋₂₂₄ Tetramer-SYLIRALTL-PE |
| TS-M146-1 | HLA-A*24:02 Influenza PB1 ₄₃₀₋₄₃₈ Tetramer-RYTKTTYWW-PE |
| TS-M147-1 | HLA-A*24:02 Influenza PB1 ₄₈₂₋₄₉₀ Tetramer-SYINRTGTF-PE |
| TS-M148-1 | HLA-A*24:02 Influenza PB1 ₄₉₈₋₅₀₅ Tetramer-RYGFVANF-PE |
| TS-M149-1 | HLA-A*24:02 Influenza PB2 ₅₄₉₋₅₅₇ Tetramer-TYQWIIRNW-PE |
| TB-0111-1 | HLA-B*27:05 Influenza NP Tetramer-SRYWAIRTR-PE |
| TB-M046-1 | HLA-B*35:01 Influenza NP Tetramer-LPFEKSTVM-PE |

MHC Class I Influenza Tetramers for Mouse

| | |
|-----------|---|
| TS-M502-1 | H-2D ^b Influenza NP Tetramer-ASNENMDTM-PE |
| TS-M508-1 | H-2D ^b Influenza NP Tetramer-ASNENMETM-PE |
| TS-M527-1 | H-2D ^b Influenza NP Tetramer-ASNENMDAM-PE |
| TS-M528-1 | H-2D ^b Influenza PA Tetramer-SSLENFRAYV-PE |
| TS-M533-1 | H-2K ^b Influenza PB1 Tetramer-SSYRRPVGI-PE |
| TS-M566-1 | H-2K ^b Influenza NS2 Tetramer-RTFSQLI-PE |
| TS-M520-1 | H-2K ^d Influenza HA Tetramer-IYSTVASSL-PE |
| TS-M535-1 | H-2K ^d Influenza HA Tetramer-LYQNVGTYV-PE |
| TB-M534-1 | H-2K ^d Influenza NP Tetramer-TYQRTRALV-PE |

MHC Class I Control Tetramers

| | |
|------------|---|
| TS-0029-1C | HLA-A*02:01 Negative Tetramer-PE |
| TS-M151-1 | HLA-A*02:01 Control Tetramer-ALAAAAAAV-PE |
| TS-M152-1 | HLA-A*11:01 Control Tetramer-ATAAAAAAK-PE |
| TS-M153-1 | HLA-A*24:02 Control Tetramer-AYAAAAAL-PE |
| TS-M007-1 | HLA-A*24:02 Negative Tetramer-RYLRDQALL-PE |
| TS-M008-1 | H-2K ^b Negative (SIY) Tetramer-SIYRYYGL-PE |
| TS-M501-1 | H-2K ^b β-galactosidase Tetramer-DAPIYTNV-PE |
| TS-M511-1 | H-2L ^d β-galactosidase Tetramer-TPHPARIGL-PE |
| TS-M525-1 | H-2K ^d EGFP Tetramer-HYLSTQSAL-PE |

MHC Class II Influenza Tetramers for Human

| | |
|-----------|--|
| TS-M804-1 | HLA-DRB1*01:01 Influenza HA ₃₀₆₋₃₁₈ Tetramer-PE |
| TS-M810-1 | HLA-DRB1*04:01 Influenza HA ₃₀₆₋₃₁₈ Tetramer-PE |
| TS-M806-1 | HLA-DRB1*04:05 Influenza HA ₃₀₆₋₃₁₈ Tetramer-PE |
| TS-M808-1 | HLA-DRB1*11:01 Influenza HA ₃₀₆₋₃₁₈ Tetramer-PE |

MHC Class II Tetramers for Human

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|-----------|--|
| TS-M803-1 | HLA-DRB1*01:01 EBV EBNA1 ₅₁₅₋₅₂₇ Tetramer-PE |
| TS-M813-1 | HLA-DRB1*01:01 Fel d 1 ₄₉₋₆₆ Tetramer-PE |
| TS-M802-1 | HLA-DRB1*01:01 HIV gag ₂₉₅₋₃₀₇ Tetramer-PE |
| TS-M815-1 | HLA-DRB1*01:01 HTLV-1 Tax ₁₅₅₋₁₆₇ Tetramer-PE |
| TS-M811-1 | HLA-DRB1*04:01 GAD65 ₅₅₅₋₅₆₇ Tetramer-PE |
| TS-M814-1 | HLA-DRB1*04:01 Lol p 1 ₁₀₅₋₁₁₇ Tetramer-PE |
| TS-M812-1 | HLA-DRB1*11:01 TT p2 ₈₂₉₋₈₄₄ Tetramer-PE |
| TS-M818-1 | HLA-DRB1*15:01 Bet v 1 ₁₄₂₋₁₅₆ Tetramer-PE |

MHC Class II Control Tetramers for Human

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|-----------|--|
| TS-M801-1 | HLA-DRB1*01:01 human CLIP ₁₀₃₋₁₁₇ Tetramer-PE |
| TS-M809-1 | HLA-DRB1*04:01 human CLIP ₁₀₃₋₁₁₇ Tetramer-PE |
| TS-M805-1 | HLA-DRB1*04:05 human CLIP ₁₀₃₋₁₁₇ Tetramer-PE |
| TS-M807-1 | HLA-DRB1*11:01 human CLIP ₁₀₃₋₁₁₇ Tetramer-PE |
| TS-M816-1 | HLA-DRB1*15:01 human CLIP ₁₀₃₋₁₁₇ Tetramer-PE |
| TS-M817-1 | HLA-DRB1*15:02 human CLIP ₁₀₃₋₁₁₇ Tetramer-PE |

MHC Class II Influenza and Control Tetramers for Mouse

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| TS-M716-1 | I-A ^b Influenza A NP ₃₁₁₋₃₂₅ Tetramer-PE |
| TS-M715-1 | I-A ^b human CLIP ₁₀₃₋₁₁₇ Tetramer-PE |

T-Select PEPTIDES

| | |
|-----------|--|
| TS-0012-P | HLA-A*02:01 Influenza M1 peptide, GILGFVFTL |
| TS-M502-P | H-2D ^b Influenza NP peptide, ASNENMDTM |
| TS-M508-P | H-2D ^b Influenza NP peptide, ASNENMETM |
| TS-M527-P | H-2D ^b Influenza NP peptide, ASNENMDAM |
| TS-M534-P | H-2K ^d Influenza NP peptide, TYQRTRALV |
| TS-M520-P | H-2K ^d Influenza HA peptide, IYSTVASSL |
| TS-M528-P | H-2D ^b Influenza PA peptide, SSLENFRAYV |
| TS-M804-P | Influenza HA ₃₀₆₋₃₁₈ peptide |
| TS-M716-P | I-A ^b Influenza NP ₃₁₁₋₃₂₅ peptide |
| TS-M151-P | HLA-A*02:01 Control peptide, ALAAAAAAV |
| TS-M152-P | HLA-A*11:01 Control peptide, ATAAAAAAK |
| TS-M153-P | HLA-A*24:02 Control peptide, AYAAAAAL |
| TS-M525-P | H-2K ^d EGFP peptide, HYLSTQSAL |
| TS-M501-P | H-2K ^b β-galactosidase peptide, DAPIYTNV |
| TS-M511-P | H-2L ^d β-galactosidase peptide, TPHPARIGL |
| TS-M008-P | H-2K ^b SIY peptide, SIYRYYGL |
| TS-M801-P | Human CLIP ₁₀₃₋₁₁₇ peptide |

Kits

| | |
|------------|--|
| 4844 | IMMUNOCYTO CD107a Detection Kit |
| 4901 | RapiType HLA-A for East Asian Pop. |
| AM-1005M | IMMUNOCYTO Cytotoxicity Detection Kit |
| TB-7300-K1 | QuickSwitch™ Quant HLA-A*02:01 Tetramer Kit-PE |
| TB-7300-K2 | QuickSwitch™ Quant HLA-A*02:01 Tetramer Kit-APC |
| TB-7300-K4 | QuickSwitch™ Quant HLA-A*02:01 Tetramer Kit-BV421 |
| TB-7301-K1 | QuickSwitch™ HLA-A*02:01 Tetramer Kit-PE |
| TB-7301-K2 | QuickSwitch™ HLA-A*02:01 Tetramer Kit-APC |
| TB-7301-K4 | QuickSwitch™ HLA-A*02:01 Tetramer Kit-BV421 |
| TB-7302-K1 | QuickSwitch™ Quant HLA-A*24:02 Tetramer Kit-PE |
| TB-7303-K1 | QuickSwitch™ HLA-A*24:02 Tetramer Kit-PE |
| TB-7400-K1 | QuickSwitch™ Quant H-2K ^b Tetramer Kit-PE |
| TB-7401-K1 | QuickSwitch™ H-2K ^b Tetramer Kit-PE |

Others

| | |
|---------|---|
| 6603861 | CD8-FITC (T8) |
| 6607011 | CD8-PC5 (T8) |
| IM-0398 | Anti-CD4 (Human) mAb |
| A07751 | Anti-CD4 (Human) mAb-PE |
| 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.