

T-Select PEPTIDE

HLA-A*02:01 Mart-1 Peptide

ELAGIGILTV

Code No.	Quantity	Concentration
TS-0009-P	100 µL	10 mg/mL

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

Peptide Sequence: ELAGIGILTV (10 aa)

Origin: Mart-1 (also known as Melan-A), 26-35 aa

HLA Restriction: HLA-A*02:01

Molecular Weight: 987 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.

HLA-A*02:01 Mart-1 Tetramers

TS-0009-1C HLA-A*02:01 Mart-1 Tetramer-ELAGIGILTV-PE
TS-0009-2C HLA-A*02:01 Mart-1 Tetramer-ELAGIGILTV-APC

Reference for this epitope

- 1) Valmori D, *et al. J Immunol* **160**:1750-1758 (1998)
- 2) Tomiyama M, *et al. Anticancer Res* **24**: 3327-3334 (2004)
- 3) Akiyama Y, *et al. J Transl Med* **3**: 4 (2005)
- 4) Sasawatari S *et al. Immunol Cell Biol* **84**: 512-521 (2006)
- 5) Takahara M, *et al. J Leukoc Biol* **83**: 742-754 (2008)
- 6) Akiyama Y *et al. Int J Oncol* **33**: 433-441 (2008)

Related Products

T-Select Peptides

TS-M069-P HLA-A*02:01 EBV LMP2₃₅₆₋₃₆₄ peptide
TS-M001-P HLA-A*24:02 EBV LMP2 peptide
TS-M035-P HLA-A*24:02 EBV LMP2₄₁₉₋₄₂₇ peptide
TS-M111-P HLA-A*11:01 EBV LMP2 peptide
TS-M135-P HLA-A*11:01 EBV LMP2 S9T peptide
TS-M002-P HLA-A*24:02 EBV BRLF1 peptide
TS-0011-P HLA-A*02:01 EBV BMLF1 peptide
TS-M003-P HLA-A*24:02 EBV BMLF1 peptide
TS-M004-P HLA-A*24:02 EBV EBNA3A peptide
TS-M005-P HLA-A*24:02 EBV EBNA3B peptide
TS-0010-P HLA-A*02:01 CMV pp65 peptide
TS-0020-P HLA-A*24:02 CMV pp65 peptide
TS-M012-P HLA-A*11:01 CMV pp65 peptide
TS-0012-P HLA-A*02:01 Influenza M1 peptide
TS-M027-P HLA-A*02:01 HIV gag peptide
TS-M007-P HLA-A*24:02 HIV env gp160 peptide
TS-M017-P HLA-A*02:01 HTLV-1 Tax₁₁₋₁₉ peptide
TS-M018-P HLA-A*24:02 HTLV-1 Tax₃₀₁₋₃₀₉ peptide
TS-0018-P HLA-A*02:01 HBV core peptide
TS-0022-P HLA-A*24:02 HBV core peptide
TS-M011-P HLA-A*02:01 NY-ESO-1 peptide
TS-M025-P HLA-A*24:02 survivin-2B peptide
TS-M026-P HLA-A*02:01 MPT51 peptide
TS-0009-P HLA-A*02:01 Mart-1 peptide
TS-0029-P HLA-A*02:01 Negative peptide

T-Select Human Tetramers

Cancer

TS-M014-1 HLA-A*24:02 WT1 (mutant) Tetramer-CYTWNQMNL-PE
 TS-M016-1 HLA-A*02:01 WT1 Tetramer-RMFPNAPYL-PE
 TS-M010-1 HLA-A*24:02 hTERT Tetramer-VYGFVRACL-PE
 TS-M115-1 HLA-A*02:01 hTERT Tetramer-ILAKFLHWL-PE
 TS-M011-1 HLA-A*02:01 NY-ESO-1 Tetramer-SLLMWTQC-PE
 TS-M105-1 HLA-A*02:01 NY-ESO-1 C9V Tetramer-SLLMWTQV-PE
 TS-M025-1 HLA-A*24:02 survivin-2B Tetramer-AYACNTSTL-PE
 TS-0009-1C HLA-A*02:01 Mart-1 Tetramer-ELAGIGILTV-PE
 TS-0013-1C HLA-A*02:01 gp100 Tetramer-IMDQVPFVSV-PE
 TS-0014-1C HLA-A*02:01 gp100 Tetramer-ITDQVPFVSV-PE
 TS-0015-1C HLA-A*02:01 Her-2/neu Tetramer-KIFGSLAFL-PE
 TS-0016-1 HLA-A*02:01 Her-2/neu Tetramer-RLQETELV-PE
 TS-0017-1 HLA-A*02:01 PR-1 Tetramer-VLQELNVTV-PE
 TS-0019-1C HLA-A*02:01 Tyrosinase Tetramer-YMDGTMSQV-PE
 TS-M114-1 HLA-A*01:01 MAG-EA1 Tetramer-EADPTGHSY-PE
 TS-M101-1 HLA-A*02:01 CD33 Tetramer-AIISGDSPV-PE
 TS-M102-1 HLA-A*02:01 CD33 A65Y Tetramer-YIISGDSPV-PE
 TS-M103-1 HLA-A*02:01 CEA Tetramer-YLSGANLNL-PE
 TS-M104-1 HLA-A*02:01 RHAMM Tetramer-ILSLELMKL-PE
 TS-M116-1 HLA-A*02:01 PRAME₃₀₀₋₃₀₉ Tetramer-ALYVDSLFFL-PE
 TS-M117-1 HLA-A*02:01 PRAME₁₀₀₋₁₀₈ Tetramer-VLDGLDVLL-PE
 TS-M118-1 HLA-A*02:01 PRAME₄₂₅₋₄₃₃ Tetramer-SLLQHLIQL-PE
 TS-M119-1 HLA-A*02:01 PRAME₁₄₂₋₁₅₁ Tetramer-SLYSFPEPEA-PE
 TS-M120-1 HLA-A*02:01 PSA₁₄₁₋₁₅₀ Tetramer-FLTPKKLQCV-PE

Virus

TS-M012-1 HLA-A*11:01 CMV pp65 Tetramer-ATVQGGQNLK-PE
 TS-0010-1C HLA-A*02:01 CMV pp65 Tetramer-NLVPMVATV-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-TPRVTGGGAM-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-VLEETSVMIL-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-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-LLWTLVVLL-PE
 TS-M069-1 HLA-A*02:01 EBV LMP2 Tetramer-FLYALALLL-PE
 TS-M032-1 HLA-A*02:01 EBV LMP2 Tetramer-CLGGLTMV-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-SSCSSCPLSK-PE
 TS-M135-1 HLA-A*11:01 EBV LMP2 S9T Tetramer-SSCSSCPLTK-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-FLPSDFPFSV-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-LLFEVFDV-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-TYFSLNNKF-PE
 TS-M064-1 HLA-A*24:02 AdV Hexon₆₆₆₋₇₀₄ 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-MPNRPNYAF-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
 TS-0012-1 HLA-A*02:01 Influenza M1 Tetramer-GILGFVFTL-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

Kits

4844 IMMUNOCYTO CD107a Detection Kit
 8223 IMMUNOCYTO IFN- γ ELISPOT Kit
 AM-1005 IMMUNOCYTO Cytotoxicity Detection Kit

Others

6603861 CD8-FITC (T8)
 6607011 CD8-PC5 (T8)
 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.