

T-Select PEPTIDE

HLA-A*24:02 CMV pp65 Peptide QYDPVAALF

Code No.	Quantity	Concentration
TS-0020-P	100 µL	10 mg/mL

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

Peptide Sequence: QYDPVAALF (9 aa)

Origin: CMV pp65, 341-349 aa

HLA Restriction: HLA-A*24:02

Molecular Weight: 1,023 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.

Please refer to the data sheet of MHC Tetramer reagent which comprises this epitope peptide and HLA-A*24:02 (MBL, PN TS-0020-1C) for more details.

HLA-A*24:02 CMV pp65 Tetramers

TS-0020-1C HLA-A*24:02 CMV pp65 Tetramer-QYDPVAALF-PE
TS-0020-2C HLA-A*24:02 CMV pp65 Tetramer-QYDPVAALF-APC

References for HLA-A*24:02 CMV pp65 epitope

- 1) Kuzushima K, *et al. Blood* **98**: 1872-1881 (2001)
- 2) Kondo E, *et al. J Immunol* **169**: 2164-2171 (2002)
- 3) Kuzushima K, *et al. Blood* **101**: 1460-1468 (2003)
- 4) Kondo E, *et al. Blood* **103**: 630-638 (2004)
- 5) Watanabe K, *et al. Int J Hematol* **88**: 311-320 (2008)
- 6) Kozako T, *et al. Leukemia* **23**: 375-382 (2009)

Related Products

T-Select Peptides

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-M001-P HLA-A*24:02 EBV LMP2 peptide
TS-M002-P HLA-A*24:02 EBV BRLF1 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-M007-P HLA-A*24:02 HIV env gp160 peptide
TS-M011-P HLA-A*02:01 NY-ESO-1 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-M025-P HLA-A*24:02 survivin-2B peptide
TS-M026-P HLA-A*02:01 MPT51 peptide
TS-M027-P HLA-A*02:01 HIV gag peptide
TS-0012-P HLA-A*02:01 Influenza M1 peptide

Kits

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

T-Select Human Tetramers

CMV

TS-0010-1C HLA-A*02:01 CMV pp65 Tetramer-NLVPMAVTV-PE
TS-0020-1C HLA-A*24:02 CMV pp65 Tetramer-QYDPVAALF-PE
TS-M012-1 HLA-A*11:01 CMV pp65 Tetramer-ATVQGQNLK-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-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

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-M011-1 HLA-A*02:01 NY-ESO-1 Tetramer-SLLMWITQC-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-IMDQVPFSV-PE
TS-0014-1C HLA-A*02:01 gp100 Tetramer-ITDQVPFSV-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-RLLQETELV-PE
TS-0017-1 HLA-A*02:01 PR-1 Tetramer-VLQELNVTV-PE
TS-0019-1C HLA-A*02:01 Tyrosinase Tetramer-YMDGTMSEQV-PE

HTLV-1

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

EBV

TS-0011-1C HLA-A*02:01 EBV BMLF1 Tetramer-GLCTLVAML-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-CLGGLLTMV-PE
TS-M003-1 HLA-A*24:02 EBV BMLF1 Tetramer-DYNFVKQLF-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-M034-1 HLA-A*24:02 EBV LMP2 Tetramer-PYLFWLAAL-PE
TS-M001-1 HLA-A*24:02 EBV LMP2 Tetramer-IYVLVLMVL-PE
TS-M035-1 HLA-A*24:02 EBV LMP2 Tetramer-TYGPVFMSL-PE
TS-M009-1 HLA-A*24:02 EBV Mix Tetramer-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-M038-1 HLA-B*35:01 EBV LMP2 Tetramer-MGSLEMVPM-PE

TS-M111-1 HLA-A*11:01 EBV LMP2 Tetramer-SSCSSCPLSK-PE
TS-M135-1 HLA-A*11:01 EBV LMP2 Tetramer-SSCSSCPLTK-PE

HIV

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

HBV

TS-0018-1C HLA-A*02:01 HBV core Tetramer-FLPSDFFPSV-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

Adenovirus

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-TYFSLNNKF-PE
TS-M064-1 HLA-A*24:02 AdV Hexon₆₈₆₋₇₀₄ 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

HPV

TS-0031-1 HLA-A*02:01 HPV E7 Tetramer-YMLDLQPET-PE

Influenza

TS-0012-1 HLA-A*02:01 Influenza M1 Tetramer-GILGFVFTL-PE

Mycobacterium tuberculosis

TS-M026-1 HLA-A*02:01 MPT51 Tetramer-TLAGKGISVV-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

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.