

T-Select PEPTIDE

H-2K^b TRP-2 Peptide

SVYDFFVWL

Code No.	Quantity	Concentration
TS-5004-P	100 µL	10 mg/mL

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

Peptide Sequence: SVYDFFVWL (9 aa)

Origin: TRP-2, 180-188 aa

HLA Restriction: H-2K^b

Molecular Weight: 1,176 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.

H-2K^b TRP-2 Tetramers

TS-5004-1C H-2K^b TRP2 Tetramer-SVYDFFVWL-PE
TS-5004-2C H-2K^b TRP2 Tetramer-SVYDFFVWL-APC

References for this epitope

- 1) Parkhurst MR *et al. Cancer Res* **58**:4895-4901 (1998)
- 2) Okano F, *et al. J Immunol* **174**: 2645-2652 (2005)
- 3) Takeshima T, *et al. Cancer Res* **70**: 2697-2706 (2010)
- 4) Kuwada E, *et al. Anticancer Res* **31**: 881-891 (2011)

Related Products

T-Select Peptides

TS-5001-P	H-2K ^b OVA peptide
TS-5002-P	H-2D ^b LCMV gp33 peptide
TS-5004-P	H-2K ^b TRP-2 peptide
TS-5008-P	H-2D ^b HPV16 E7 peptide
TS-M501-P	H-2K ^b β-galactosidase peptide
TS-M502-P	H-2D ^b Influenza NP peptide
TS-M508-P	H-2D ^b Influenza NP peptide
TS-M527-P	H-2D ^b Influenza NP peptide
TS-M520-P	H-2K ^d Influenza HA peptide
TS-M528-P	H-2D ^b Influenza PA peptide
TS-M503-P	H-2K ^d Listeria LLO peptide
TS-M505-P	H-2D ^b human gp100 peptide
TS-M506-P	H-2K ^d RSV peptide
TS-M507-P	H-2K ^b MuLV peptide
TS-M521-P	H-2L ^d MuLV gp70 peptide
TS-M509-P	H-2K ^b SeV peptide
TS-M510-P	H-2L ^d MCMV IE1 peptide
TS-M511-P	H-2L ^d β-galactosidase peptide
TS-M512-P	H-2D ^b LCMV gp33 (C9M) peptide
TS-M513-P	H-2D ^b LCMV NP396 peptide
TS-M514-P	H-2L ^d LCMV NP118 peptide
TS-M515-P	H-2K ^d malaria peptide
TS-M516-P	H-2D ^d HIV P18-110 peptide
TS-M517-P	H-2D ^d BCG MPT51 peptide
TS-M518-P	H-2D ^b CEA peptide
TS-M519-P	H-2L ^d P815 peptide
TS-M522-P	H-2L ^d HBsAg peptide
TS-M523-P	H-2K ^b HSV-1 gB peptide
TS-M524-P	H-2D ^b HY Uty peptide
TS-M525-P	H-2K ^d EGFP peptide
TS-M526-P	H-2K ^d HER2 peptide

TS-M529-P H-2K^b VSV NP peptide
TS-M530-P H-2D^k polyomavirus MT peptide
TS-M531-P H-2D^k HTLV-1 Tax₃₈₋₄₆ peptide
TS-M008-P H-2K^b SIY 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 OVA 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

T-Select Mouse Tetramers

Cancer

TS-5004-1C H-2K^b TRP2 Tetramer-SVYDFVWL-PE
TS-M504-1 H-2D^b WT1 Tetramer-RMFPNAPYL-PE
TS-M505-1 H-2D^b human gp100 Tetramer-KVPRNQDWL-PE
TS-M518-1 H-2D^b CEA Tetramer-EAQNTTYL-PE
TS-M519-1 H-2L^d P815 Tetramer-LPYLGWLVF-PE
TS-M526-1 H-2K^d HER2 Tetramer-TYLPTNASL-PE

Virus

TS-5008-1C H-2D^b HPV16 E7 Tetramer-RAHYNIVTF-PE
TS-M509-1 H-2K^b SeV Tetramer-FAPGNYPAL-PE
TS-M510-1 H-2L^d MCMV IE1 Tetramer-YPHFMPTNL-PE
TS-M522-1 H-2L^d HBsAg Tetramer-IPQSLDSWWTSL-PE
TS-M523-1 H-2K^b HSV-1 gB Tetramer-SSIEFARL-PE
TS-M529-1 H-2K^b VSV NP Tetramer-RGYVYQGL-PE
TS-M530-1 H-2D^k polyomavirus MT Tetramer-RRLGRTLLL-PE
TS-M531-1 H-2D^k HTLV-1 Tax₃₈₋₄₆ Tetramer-ARLHRHALL-PE
TS-5016-1 H-2D^b MoMSV Tetramer-(Abu)(Abu)L(Abu)LTVFL-PE
TS-5017-1C H-2D^b SIV gag Tetramer-AAVKNWMTQTL-PE

Influenza

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-M520-1 H-2K^d Influenza HA Tetramer-IYSTVASSL-PE

LCMV

TS-5002-1C H-2D^b LCMV gp33 Tetramer-KAVYNFATC-PE
TS-5009-1 H-2D^b LCMV gp₂₇₆₋₂₈₆ Tetramer-SGVENPGGYCL-PE
TS-5010-1C H-2K^b LCMV gp₃₄₋₄₁ Tetramer-AVYNFATC-PE
TS-5011-1 H-2K^b LCMV gp₃₄₋₄₃ Tetramer-AVYNFATCGI-PE
TS-5012-1 H-2K^b LCMV gp₁₁₈₋₁₂₅ Tetramer-ISHNFCNL-PE
TS-5014-1 H-2K^b LCMV L protein Tetramer-LEYDFNKL-PE
TS-5015-1 H-2K^b LCMV NP₂₀₅₋₂₁₂ Tetramer-YTVKYPNL-PE
TS-M512-1 H-2D^b LCMV gp33 (C9M) Tetramer-KAVYNFATM-PE
TS-M513-1 H-2D^b LCMV NP396 Tetramer-FQPQNGQFI-PE
TS-M514-1 H-2L^d LCMV NP118 Tetramer-RPQASGVYM-PE

HIV

TS-M516-1 H-2D^d HIV P18-I10 Tetramer-RGPGRAFVTI-PE
TS-5007-1 H-2K^b HIV gag Tetramer-AMQMLKETI-PE

RSV

TS-M506-1 H-2K^d RSV Tetramer-SYIGSINNI-PE
TS-5018-1C H-2D^b RSV Tetramer-NAITNAKII-PE

MuLV

TS-M507-1 H-2K^b MuLV p15E Tetramer-KSPWFITL-PE
TS-M521-1 H-2L^d MuLV gp70 Tetramer-SPSYVYHQF-PE

OVA

TS-5001-1C H-2K^b OVA Tetramer-SIINFEKL-PE
TS-M541-1 H-2K^b OVA E1 Tetramer-EIINFEKL-PE
TS-M542-1 H-2K^b OVA G4 Tetramer-SIIGFEKL-PE
TS-M543-1 H-2K^b OVA Q4H7 Tetramer-SIIQFEHL-PE

Foreign antigen

TS-M525-1 H-2K^d EGFP Tetramer-HYLSTQSAL-PE
TS-M503-1 H-2K^d Listeria LLO Tetramer-GYKDGNEYI-PE
TS-M515-1 H-2K^d malaria Tetramer-SYIPSAEKI-PE
TS-M517-1 H-2D^d BCG MPT51 Tetramer-GGPHAVYLL-PE
TS-M501-1 H-2K^b β-galactosidase Tetramer-DAPIYTNV-PE
TS-M511-1 H-2L^d β-galactosidase Tetramer-TPHPARIGL-PE

Mouse class II Tetramers

TS-M704-1 I-A^b MOG₃₅₋₅₅ Tetramer-PE
TS-M705-1 I-A^b FMLV₁₂₃₋₁₄₁ Tetramer-PE
TS-M706-1 I-A^b Eα₅₂₋₆₈ Tetramer-PE
TS-M707-1 I-A^b ESAT-6₁₋₂₀ Tetramer-PE
TS-M710-1 I-A^b OVA₃₂₃₋₃₃₉ Tetramer-PE

Others

TS-M524-1 H-2D^b HY Uty Tetramer-WMHHNMDLI-PE
TS-MCD-1 Mouse CD1d Tetramer-PE

Kit

AM-1005 IMMUNOCYTO Cytotoxicity Detection Kit

Others

D341-4 mouse CD4-FITC (GK1.5)
D271-4 mouse CD8-FITC (KT15)
D271-A64 mouse CD8-Alexa Fluor[®] 647 (KT15)
732121 mouse CD16/32 (93)
732151 mouse CD45-APC (I3/2.3)
732152 mouse CD45-SPRD (I3/2.3)
K0221-3 anti-mouse TCR DO11.10 (KJ1.26)
K0221-5 anti-mouse TCR DO11.10-PE (KJ1.26)
K0222-3 anti-mouse TCR 3DT-52.5 (KJ12.98)
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.