

T-Select PEPTIDE

H-2K^d HER2 Peptide TYLPTNASL

Code No.	Quantity	Concentration
TS-M526-P	100 µL	10 mg/mL

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

Peptide Sequence: TYLPTNASL (9 aa)

Origin: Human epidermal growth factor receptor 2 (HER2/neu), 63-71 aa

MHC Restriction: H-2K^d

Molecular Weight: 979 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.

Please refer to the data sheet of MHC Tetramer reagent which comprises this epitope peptide and H-2K^d (MBL, PN TS-M526-1) for more details.

H-2K^d HER2 Tetramer

TS-M526-1 H-2K^d HER2 Tetramer-TYLPTNASL-PE

Mouse Strain H-2K Haplotypes

H-2K allele	H-2K ^b	H-2K ^d	H-2K ^k
Mouse strains	C57BL/-, BXSb/Mp, 129/-	BALB/c, DBA/2, NOD, B10.D2	C3H/He, AKR/J

References for This Epitope

- 1) Nagata Y, *et al. J Immunol* **159**: 1336-1343 (1997)
- 2) Muthuswamy SK, *et al. Mol Cell Biol* **19**: 6845-6857 (1999)
- 3) Okugawa T, *et al. Eur J Immunol* **30**: 3338-3346 (2000)
- 4) Ikuta Y, *et al. Blood* **99**: 3717-3724 (2002)
- 5) Gallo P, *et al. Int J Cancer* **113**: 67-77 (2005)
- 6) Rohrbach F, *et al. J Immunol* **174**: 5481-5489 (2005)
- 7) Ko HJ, *et al. Cancer Res* **67**: 7477-7486 (2007)

Related Products

T-Select PEPTIDES

TS-5001-P	H-2K ^b	OVA peptide, SIINFEKL
TS-5002-P	H-2D ^b	LCMV gp33 peptide, KAVYNFATC
TS-5004-P	H-2K ^b	TRP-2 peptide, SVYDFVWL
TS-5008-P	H-2D ^b	HPV16 E7 peptide, RAHYNIVTF
TS-M501-P	H-2K ^b	β-galactosidase peptide, DAPIYTNV
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, SLENFRAYV
TS-M503-P	H-2K ^d	Listeria LLO peptide, GYKDGNEYI
TS-M505-P	H-2D ^b	human gp100 peptide, KVPRNQDWL
TS-M506-P	H-2K ^d	RSV peptide, SYIGSINNI
TS-M507-P	H-2K ^b	MuLV p15E peptide, KSPWFITL
TS-M521-P	H-2L ^d	MuLV gp70 peptide, SPSVYVHQF
TS-M509-P	H-2K ^b	SeV peptide, FAPGNYPAL
TS-M510-P	H-2L ^d	MCMV IE1 peptide, YPHFMPTNL
TS-M511-P	H-2L ^d	β-galactosidase peptide, TPHPARIGL
TS-M512-P	H-2D ^b	LCMV gp33 (C9M) peptide, KAVYNFATM
TS-M513-P	H-2D ^b	LCMV NP396 peptide, FQPQNGQFI

TS-M514-P	H-2L ^d	LCMV NP118 peptide, RPQASGVYM
TS-M515-P	H-2K ^d	malaria Pb9 peptide, SYIPSAEKI
TS-M516-P	H-2D ^d	HIV P18-I10 peptide, RGPGRFVFI
TS-M517-P	H-2D ^d	BCG MPT51 peptide, GGPHAVYLL
TS-M518-P	H-2D ^b	CEA peptide, EAQNNTYL
TS-M519-P	H-2L ^d	P815 peptide, LPYLGWLVF
TS-M522-P	H-2L ^d	HBsAg peptide, IPQSLDSWWTSL
TS-M523-P	H-2K ^b	HSV-1 gB peptide, SSIEFARL
TS-M524-P	H-2D ^b	HY Uty peptide, WMHHNMDLI
TS-M525-P	H-2K ^d	EGFP peptide, HYLSTQSAL
TS-M526-P	H-2K ^d	HER2 peptide, TYLPTNASL
TS-M529-P	H-2K ^b	VSV NP peptide, RGYVYQGL
TS-M530-P	H-2D ^k	polyomavirus MT peptide, RRLGRTLII
TS-M531-P	H-2D ^k	HTLV-1 Tax ₃₈₋₄₆ peptide, ARLHRHALL
TS-M008-P	H-2K ^b	SIY peptide, SIYRYVGL
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	MOG ₃₅₋₅₅ peptide
TS-M707-P	I-A ^b	ESAT-6 ₁₋₂₀ peptide
TS-M708-P	I-A ^k	HEL peptide
TS-M716-P	I-A ^b	Influenza NP ₃₁₁₋₃₂₅ peptide
TS-M721-P	I-A ^b	<i>L. monocytogenes</i> LLO ₁₉₀₋₂₀₁ peptide
TS-M722-P	I-A ^b	mouse 2W1S peptide
TS-M724-P	I-A ^b	LCMV GP ₁₂₆₋₁₄₀ peptide

Kits

AM-1005M	IMMUNOCYTO Cytotoxicity Detection Kit
TB-7400-K1	QuickSwitch™ Quant H-2K ^b Tetramer Kit-PE
TB-7400-K2	QuickSwitch™ Quant H-2K ^b Tetramer Kit-APC
TB-7400-K4	QuickSwitch™ Quant H-2K ^b Tetramer Kit-BV421
TB-7401-K1	QuickSwitch™ H-2K ^b Tetramer Kit-PE
TB-7401-K2	QuickSwitch™ H-2K ^b Tetramer Kit-APC
TB-7401-K4	QuickSwitch™ H-2K ^b Tetramer Kit-BV421

Others

D341-4	mouse CD4-FITC (GK1.5)
D271-4	mouse CD8-FITC (KT15)
D271-5	mouse CD8-PE (KT15)
D271-A64	mouse CD8-Alexa Fluor [®] 647 (KT15)
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.

T-Select MHC Tetramers

Cancer

TB-5004-1C	H-2K ^b	TRP2 Tetramer-SVYDFVWL-PE
TS-M504-1	H-2D ^b	WT1 ₁₂₆₋₁₃₄ 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
TS-M544-1	H-2K ^d	JAK1 Tetramer-SYFPEITHI-PE
TS-M545-1	H-2K ^d	Erk2 K136Q Tetramer-QYIHSANVL-PE
TS-M546-1	H-2D ^b	gp100 Tetramer-EGSRNQDWL-PE
TS-M558-1	H-2K ^b	MAGE-AX ₁₆₉₋₁₇₆ Tetramer-LGITYDGM-PE
TB-5105-1	H-2K ^d	MAGE-A3 Tetramer-SYVKVLHMM-PE
TS-M559-1	H-2K ^b	MAGE-A5 Tetramer-HNTQYCNL-PE
TS-M561-1	H-2D ^b	hPSA Tetramer-HCIRNKSVIL-PE
TS-M562-1	H-2K ^b	mTERT Tetramer-VGRNFTNL-PE
TS-M563-1	H-2K ^b	pBM1 Tetramer-INDFNTI-PE
TB-5102-1	H-2K ^b	Survivin Tetramer-MFFCFKEL-PE
TB-5108-1	H-2D ^b	Survivin Tetramer-ATFKNWPFL-PE
TB-5104-1	H-2K ^d	Tnpo3 Tetramer-SYMLQALCI-PE
TB-0016-1	HLA-A*02:01	Her-2/neu Tetramer-RLLQETELV-PE
TB-0015-1	HLA-A*02:01	Her-2/neu E75 Tetramer-KIFGSLAFL-PE

MHC Class II Tetramers

TS-M703-1	I-A ^d	OVA ₃₂₃₋₃₃₉ Tetramer-PE
TS-M704-1	I-A ^b	MOG ₃₅₋₅₅ Tetramer-PE
TS-M705-1	I-A ^b	FMLV ₁₂₃₋₁₄₁ Tetramer-PE
TS-M706-1	I-A ^b	Eα ₅₂₋₆₈ Tetramer-PE
TS-M707-1	I-A ^b	ESAT-6 ₁₋₂₀ Tetramer-PE
TS-M710-1	I-A ^b	OVA ₃₂₃₋₃₃₉ Tetramer-PE
TS-M715-1	I-A ^b	human CLIP ₁₀₃₋₁₁₇ Tetramer-PE
TS-M716-1	I-A ^b	Influenza A NP ₃₁₁₋₃₂₅ Tetramer-PE
TS-M720-1	I-A ^d	human CLIP ₁₀₃₋₁₁₇ Tetramer-PE
TS-M721-1	I-A ^b	<i>L. monocytogenes</i> LLO ₁₉₀₋₂₀₁ Tetramer-PE
TS-M722-1	I-A ^b	mouse 2W1S Tetramer-PE
TS-M724-1	I-A ^b	LCMV GP ₁₂₆₋₁₄₀ Tetramer-PE