

T-Select PEPTIDE

I-A^b mouse 2W1S Peptide

EAWGALANWAVDSA

Code No.	Quantity	Concentration
TS-M722-P	100 µL	10 mg/mL

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

Peptide Sequence

EAWGALANWAVDSA (14 aa)

Origin

Variation amino acid sequence of peptide 52-68 from the mouse E α (ASFEAQGALANIAVDKA)

MHC Restriction: I-A^b

Molecular Weight: 1,461 Da

Purity: \geq 98 %

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 I-A^b (MBL, PN TS-M722-1 or -2) for more details.

I-A^b mouse 2W1S Tetramer

TS-M722-1 I-A^b mouse 2W1S Tetramer-PE
TS-M716-2 I-A^b Influenza NP₃₁₁₋₃₂₅ Tetramer-APC

Mouse Strain I-A Haplotypes

MHC class II	I-A ^b	I-A ^d	I-A ^k	I-A ^s	I-A ^{g7}
Mouse strains	C57BL/ BXSB/Mp 129/-	BALB/c DBA/2 B10.D2	C3H/He	SJL/J B10.S	NOD

References for mouse 2W1S

- 1) Ree W, *et al. PNAS* **96**: 9781-9786 (1999)
- 2) Moon J, *et al. Immunity* **27**: 203-213 (2007)
- 3) Ertelt J, *et al. J Immunol* **182**: 3032-3038 (2009)

Related Products

T-Select Peptides

TS-M707-P I-A^b ESAT-6₁₋₂₀ 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 OVA₃₂₃₋₃₃₉ helper peptide
TS-M704-P I-A^b MOG₃₅₋₅₅ peptide
TS-M708-P I-A^k HEL peptide
TS-M716-P I-A^b Influenza NP₃₁₁₋₃₂₅ peptide
TS-M721-P I-A^b *L. monocytogenes* LLO₁₉₀₋₂₀₁ peptide
TS-M722-P I-A^b mouse 2W1S peptide

TS-M724-P I-A^b LCMV GP₁₂₆₋₁₄₀ peptide
TS-M801-P Human CLIP₁₀₃₋₁₁₇ peptide
TS-M802-P HLA-DRB1*01:01 HIV gag₂₉₅₋₃₀₇ peptide
TS-M803-P HLA-DRB1*01:01 EBV EBNA1₅₁₅₋₅₂₇ peptide
TS-M804-P Influenza HA₃₀₆₋₃₁₈ peptide
TS-M811-P HLA-DRB1*04:01 GAD65₅₅₅₋₅₆₇ peptide
TS-M812-P HLA-DRB1*11:01 TT p2₈₂₉₋₈₄₄ peptide
TS-M815-P HLA-DRB1*01:01 HTLV-1 Tax₁₅₅₋₁₆₇ peptide

TS-M809-2 HLA-DRB1*04:01 human CLIP₁₀₃₋₁₁₇ Tetramer-APC
TS-M810-1 HLA-DRB1*04:01 Influenza HA₃₀₆₋₃₁₈ Tetramer-PE
TS-M810-2 HLA-DRB1*04:01 Influenza HA₃₀₆₋₃₁₈ Tetramer-APC
TS-M811-1 HLA-DRB1*04:01 GAD65₅₅₅₋₅₆₇ Tetramer-PE
TS-M811-2 HLA-DRB1*04:01 GAD65₅₅₅₋₅₆₇ Tetramer-APC
TS-M812-1 HLA-DRB1*11:01 TT p2₈₂₉₋₈₄₄ Tetramer-PE
TS-M812-2 HLA-DRB1*11:01 TT p2₈₂₉₋₈₄₄ Tetramer-APC
TS-M815-1 HLA-DRB1*01:01 HTLV-1 Tax₁₅₅₋₁₆₇ Tetramer-PE
TS-M815-2 HLA-DRB1*01:01 HTLV-1 Tax₁₅₅₋₁₆₇ Tetramer-APC
TS-M816-1 HLA-DRB1*15:01 human CLIP₁₀₃₋₁₁₇ Tetramer-PE
TS-M816-2 HLA-DRB1*15:01 human CLIP₁₀₃₋₁₁₇ Tetramer-APC
TS-M817-1 HLA-DRB1*15:02 human CLIP₁₀₃₋₁₁₇ Tetramer-PE
TS-M817-2 HLA-DRB1*15:02 human CLIP₁₀₃₋₁₁₇ Tetramer-APC

T-Select MHC Tetramers

Mouse class II Tetramers

TS-M707-1 I-A^b ESAT-6₁₋₂₀ Tetramer-PE
TS-M703-1 I-A^d OVA₃₂₃₋₃₃₉ Tetramer-PE
TS-M703-2 I-A^d OVA₃₂₃₋₃₃₉ Tetramer-APC
TS-M704-1 I-A^b MOG₃₅₋₅₅ Tetramer-PE
TS-M704-2 I-A^b MOG₃₅₋₅₅ Tetramer-APC
TS-M705-1 I-A^b FMLL₁₂₃₋₁₄₁ Tetramer-PE
TS-M706-1 I-A^b E₁₅₂₋₆₈ Tetramer-PE
TS-M710-1 I-A^b OVA₃₂₃₋₃₃₉ Tetramer-PE
TS-M710-2 I-A^b OVA₃₂₃₋₃₃₉ Tetramer-APC
TS-M715-1 I-A^b human CLIP₁₀₃₋₁₁₇ Tetramer-PE
TS-M715-2 I-A^b human CLIP₁₀₃₋₁₁₇ Tetramer-APC
TS-M716-1 I-A^b Influenza NP₃₁₁₋₃₂₅ Tetramer-PE
TS-M716-2 I-A^b Influenza NP₃₁₁₋₃₂₅ Tetramer-APC
TS-M720-1 I-A^d human CLIP₁₀₃₋₁₁₇ Tetramer-PE
TS-M720-2 I-A^d human CLIP₁₀₃₋₁₁₇ Tetramer-APC
TS-M721-1 I-A^b *L. monocytogenes* LLO₁₉₀₋₂₀₁ Tetramer-PE
TS-M721-2 I-A^b *L. monocytogenes* LLO₁₉₀₋₂₀₁ Tetramer-APC
TS-M722-1 I-A^b mouse 2W1S Tetramer-PE
TS-M722-2 I-A^b mouse 2W1S Tetramer-APC
TS-M724-1 I-A^b LCMV GP₁₂₆₋₁₄₀ Tetramer-PE
TS-M724-1 I-A^b LCMV GP₁₂₆₋₁₄₀ Tetramer-APC

Human class II Tetramers

TS-M801-1 HLA-DRB1*01:01 human CLIP₁₀₃₋₁₁₇ Tetramer-PE
TS-M801-2 HLA-DRB1*01:01 human CLIP₁₀₃₋₁₁₇ Tetramer-APC
TS-M802-1 HLA-DRB1*01:01 HIV gag₂₉₅₋₃₀₇ Tetramer-PE
TS-M802-2 HLA-DRB1*01:01 HIV gag₂₉₅₋₃₀₇ Tetramer-APC
TS-M803-1 HLA-DRB1*01:01 EBV EBNA1₅₁₅₋₅₂₇ Tetramer-PE
TS-M803-2 HLA-DRB1*01:01 EBV EBNA1₅₁₅₋₅₂₇ Tetramer-APC
TS-M804-1 HLA-DRB1*01:01 Influenza HA₃₀₆₋₃₁₈ Tetramer-PE
TS-M804-2 HLA-DRB1*01:01 Influenza HA₃₀₆₋₃₁₈ Tetramer-APC
TS-M805-1 HLA-DRB1*04:05 human CLIP₁₀₃₋₁₁₇ Tetramer-PE
TS-M805-2 HLA-DRB1*04:05 human CLIP₁₀₃₋₁₁₇ Tetramer-APC
TS-M806-1 HLA-DRB1*04:05 Influenza HA₃₀₆₋₃₁₈ Tetramer-PE
TS-M806-2 HLA-DRB1*04:05 Influenza HA₃₀₆₋₃₁₈ Tetramer-APC
TS-M807-1 HLA-DRB1*11:01 human CLIP₁₀₃₋₁₁₇ Tetramer-PE
TS-M807-2 HLA-DRB1*11:01 human CLIP₁₀₃₋₁₁₇ Tetramer-APC
TS-M808-1 HLA-DRB1*11:01 Influenza HA₃₀₆₋₃₁₈ Tetramer-PE
TS-M808-2 HLA-DRB1*11:01 Influenza HA₃₀₆₋₃₁₈ Tetramer-APC
TS-M809-1 HLA-DRB1*04:01 human CLIP₁₀₃₋₁₁₇ Tetramer-PE

Kit

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

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 3D7-52.5 (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.