

T-Select PEPTIDE

HLA-A*02:01 Mart-1 Peptide

ELAGIGILTV

Code No.	Quantity	Concentration
TS-0009-P	100 μ L	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: 985.19 Da

Purity: \geq 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

TB-0009-1	HLA-A*02:01 Mart-1 Tetramer-ELAGIGILTV-PE
TB-0009-2	HLA-A*02:01 Mart-1 Tetramer-ELAGIGILTV-APC
TB-0009-4	HLA-A*02:01 Mart-1 Tetramer-ELAGIGILTV-BV421

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

Please check our web site (<https://ruo.mbl.co.jp>) for up-to-date information on products and custom MHC Tetramers.

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