

T-Select PEPTIDE

H-2K^b HSV-1 gB

Peptide

SSIEFARL

Code No.
TS-M523-P

Quantity
100 µL

Concentration
10 mg/mL

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

Peptide Sequence: SSIEFARL (8 aa)

Origin: HSV-1 glycoprotein B (gB), 498-505 aa

MHC Restriction: H-2K^b

Molecular Weight: 922.05 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 H-2K^b (MBL, PN TS-M523-1) for more details.

H-2K^b HSV-1 gB Tetramer

TS-M523-1 H-2K^b HSV-1 gB Tetramer-SSIEFARL-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	C3H/He, AKR/J

References for this epitope

- 1) Hanke T, *et al. J Virol* **65**: 1177–1186 (1991)
- 2) Bonneau RH, *et al. Virology* **195**: 62-70 (1993)
- 3) Kumaraguru U, *et al. J Immunol* **166**: 1066–1074 (2001)
- 4) Mueller SN, *et al. Immunol Cell Biol* **80**: 156-163 (2002)
- 5) Messaoudi I, *et al. Science* **298**: 1797-1800 (2002)
- 6) Wojtasiak M, *et al. Int Immunol* **16**: 1333–1341 (2004)
- 7) van Lint A, *et al. J Immunol* **172**: 392–397 (2004)
- 8) Suvas S, *et al. J Virol* **79**: 11935–11942 (2005)
- 9) Sheridan BS, *et al. J Immunol* **177**: 8356–8364 (2006)
- 10) Reading PC, *et al. J Immunol* **179**: 3214–3221 (2007)
- 11) Lang A, *et al. J Immunol* **180**: 4848–4857 (2008)
- 12) Wuest TR. and Carr DJJ. *J Immunol* **181**: 7985–7993 (2008)
- 13) Burns AM, *et al. J Immunol* **182**: 1314–1324 (2009)
- 14) Sheridan BS, *et al. J Virol* **83**: 2237–2245 (2009)
- 15) Haluszczak C, *et al. J Exp Med* **206**: 435-448 (2009)
- 16) Frank GM, *et al. J Immunol* **184**: 277–286 (2010)
- 17) Fukaya T, *et al. PNAS* **109**: 11288-11293 (2012)
- 18) Imai T, *et al. PLoS ONE* **8**: e72050 (2013)
- 19) Aoki R, *et al. J Invest Dermatol* **133**: 2170–2179 (2013)

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