

T-Select PEPTIDE

I-A^b MOG₃₅₋₅₅ Peptide

MEVGWYRSPFSRVVHLYRNGK

Code No.	Quantity	Concentration
TS-M704-P	100 µL	10 mg/mL

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

Peptide Sequence

MEVGWYRSPFSRVVHLYRNGK (21 aa)

Origin

Myelin oligodendritic glycoprotein (MOG), 35-55 aa

MHC Restriction: I-A^b

Molecular Weight: 2581.98 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 I-A^b (MBL, PN TS-M704-1) for more details.

I-A^b MOG₃₅₋₅₅ Tetramer

TS-M704-1 I-A^b MOG₃₅₋₅₅ Tetramer-PE

TS-M704-2 I-A^b MOG₃₅₋₅₅ Tetramer-APC

Mouse I-A Allele

MHC class II	I-A ^b	I-A ^d	I-A ^k	I-A ^s
Mouse strains	C57BL/-, BXSB/Mp, 129/-	BALB/c, DBA/2, B10D2	C3H/He	SJL/J B10.S

References for MOG₃₅₋₅₅

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- 4) Korn T, *et al. Nat Med* **13**: 423-431 (2007)
- 5) Chung DT, *et al. Int Immunol* **19**: 1003-1010 (2007)
- 6) Sabatino JJ, Jr, *et al. J Immunol* **180**: 4451-4457 (2008)
- 7) Xiao S, *et al. J Immunol* **181**: 2277-2284 (2008)
- 8) Wasserman HA, *et al. J Immunol* **181**: 6843-6849 (2008)
- 9) Elyaman W, *et al. Am J Pathol* **173**: 411-422 (2008)
- 10) Korn T, *et al. PNAS* **105**: 18460-18465 (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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