EBV (LMP1) Peptide Pool

Epstein-Barr virus (LMP1) peptide pool for immune cell activation

Catalog #100-1388 ~25 µg (15 nmol)/peptide

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Product Description

EBV (LMP1) Peptide Pool is a lyophilized mixture of 94 peptides from latent membrane protein 1 (LMP1) of Epstein-Barr virus (EBV; strain B95-8). The pool consists of 15-mer peptides with 11-amino-acid overlaps that cover amino acids 1 - 386 on LMP1. LMP1 is essential for EBV-mediated growth transformation of B cells (Kaye et al.) and has been shown to downregulate toll-like receptor 9 (TLR9) expression in infected cells, a mechanism the virus may use to escape host innate immune recognition (Fathallah et al.). One unit of this product (i.e. ~25 µg/peptide) is sufficient for stimulating 2.5 x 10^8 cells.

APPLICATIONS

- Antigen-specific T cell stimulation
- Cellular immune response
- Immune monitoring
- T cell assays
- T cell expansion

Product Information

Number of Peptides:	94
Source:	Epstein-Barr virus (strain B95-8) (also known as human herpesvirus 4 [HHV-4])
Accession Number:	P03230
Protein Name:	Latent membrane protein 1 (LMP1)
Protein Sequence:	MEHDLERGPPGPRRPPRGPPLSSSLGLALLLLLLALLFWLYIVMSDWTGGALLVLYSFALMLIIIILIIFIFRRDLL CPLGALCILLLMITLLLIALWNLHGQALFLGIVLFIFGCLLVLGIWIYLLEMLWRLGATIWQLLAFFLAFFLDLILLIIALYL QQNWWTLLVDLLWLLLFLAILIWMYYHGQRHSDEHHHDDSLPHPQQATDDSGHESDSNSNEGRHHLLVSGAGD GPPLCSQNLGAPGGGPDNGPQDPDNTDDNGPQDPDNTDDNGPHDPLPQDPDNTDDNGPQDPDNTDDNGPH DPLPHSPSDSAGNDGGPPQLTEEVENKGGDQGPPLMTDGGGGHSHDSGHGGGDPHLP TLLLGSSGSGGDDDDPHGPVQLSYYD
Gene Name:	LMP1
Purity:	Average 70%
Formulation:	Lyophilized as trifluoroacetate salts

Preparation and Storage

Storage:	Store at -20°C.
Stability:	Stable as supplied until expiry date (EXP) on label.
Preparation:	Warm to room temperature (15 - 25°C) before reconstitution. Add pure dimethyl sulfoxide (DMSO; ~40 µL) and dilute with water to the desired concentration. Final concentration of DMSO must be below 1% (v/v) to avoid toxicity in the biological system. If not used immediately, aliquot and store at -20°C. Protect from light. Avoid repeated freeze-thaw cycles.

Related Products

For a complete list of peptide pools, as well as related products available from STEMCELL Technologies, visit www.stemcell.com, or contact us at techsupport@stemcell.com.

References

Fathallah I et al. (2010) EBV latent membrane protein 1 is a negative regulator of TLR9. J Immunol 185(11): 6439–47.

Kaye KM et al. (1993) Epstein-Barr virus latent membrane protein 1 is essential for B-lymphocyte growth transformation. Proc Natl Acad Sci USA 90(19): 9150–4.