

# EBV (EBNA-3B) Peptide Pool

**Epstein-Barr virus (EBNA-3B) peptide pool for immune cell activation**

Catalog #100-1387

~25 µg (15 nmol)/peptide



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TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

[INFO@STEMCELL.COM](mailto:INFO@STEMCELL.COM) • [TECHSUPPORT@STEMCELL.COM](mailto:TECHSUPPORT@STEMCELL.COM)

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## Product Description

EBV (EBNA-3B) Peptide Pool is a lyophilized mixture of 234 peptides from Epstein-Barr nuclear antigen 3B (EBNA-3B) of Epstein-Barr virus (EBV; strain AG876). The pool consists of 15-mer peptides with 11-amino-acid overlaps that cover amino acids 1 - 946 on EBNA-3B. EBNA-3B is considered nonessential for B cell growth transformation (Chen et al., 2005; Tomkinson & Kieff) but has been shown to regulate the expression of cellular genes in EBV-infected cells (Chen et al., 2006). One unit of this product (i.e. ~25 µg/peptide) is sufficient for stimulating  $2.5 \times 10^8$  cells.

### APPLICATIONS

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

## Product Information

Number of Peptides:	234
Source:	Epstein-Barr virus (strain AG876) (also known as human herpesvirus 4 [HHV-4])
Accession Number:	Q1HVG4
Protein Name:	Epstein-Barr nuclear antigen 3B (EBNA-3B); Epstein-Barr nuclear antigen 4 (EBNA-4)
Protein Sequence:	MKKAWLSRAQQADAGGASGEDPPDYGDQGNVQQVGS DPISPAIGPFELSAASEDDPQSGPVEENLDAAAREE EEPDEQEHN GGDDPLEVHTRQPRFVDVNPTQAPVIQLVHAVYDSMLQSDLRSLGSLFLEQNLNIEEFIWCMCTVR HRCQAIRQKPLPIDKQRRWKLLSPYRTWRMGYRTQTLNVNSFETGGDKVHPLLVTATLGCEEGLRHAITYSAGIVQ LPRMSDQNQKIETAFLMARRARSLAERYTLFFDLVSSGNTLYAIWIGLGTNRNVAVFVEFGWLCKKDHTHIREWF RQCTGRPSPSKPWMRAHPVAVPYDDPLTSEETDLAYARGLAMSIEAARLPDDPIIVEDDDESEEIEDKCDKDEEES GTEDVTSIPQTLPHSPTVYGRPSVFYRKPDTKSTKKCRAIVTDLISIIKVIDEHRKKKTARTEQPRAKPDSPAPT VVLR RPPTQKVTGPAGSLSVQAQLEPWQPLSWPHETRVLHGPPTQGDQAHGSMLDLLEKDDQHMEQQVMATLLPPE PHQPRSGRRAPCVYTADLDIESDEPATSEPVLDQLLPAPGLGPLAIQPLTSPPTSQRLSSAPSHAQTPWPVTHPSQT PGGPTQSLAPETEAPRQWPMPLRPIPLHPLRMQPISFNPAVRPTPHQPPQVEPTFYQSTWVKPPQYQPMGHI PYQPRPTGHSTMLRPQWAPTTMQPPPRAPTPMPPPPQGPPTAMQRPQGAPTMPMPPPQGPPTAMQRPGRAPTMP PPQGPPTAMQLSPRALTGQKGPAGHILRQLLTGGVKSGRPSLKFKAAALERQAAAGLRPSGSGTGAKIVQAPVY PPVLQPIQVMWQVGSSKAVAASTVTQAPTEYTGERRLGGPMSPTDIPPSKRVKKKAYPERKTPHGGPSHSSTVMW ENVSQGGQQTLECGGTDKQERNMLGMGDIASPPSSSETSNDE
Gene Name:	EBNA4
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](http://www.stemcell.com), or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

- Chen A et al. (2005) Epstein-Barr virus with the latent infection nuclear antigen 3B completely deleted is still competent for B-cell growth transformation in vitro. *J Virol* 79(7): 4506–9.
- Chen A et al. (2006) EBNA-3B-and EBNA-3C-regulated cellular genes in Epstein-Barr virus-immortalized lymphoblastoid cell lines. *J Virol* 80(20): 10139–50.
- Tomkinson B & Kieff E. (1992) Use of second-site homologous recombination to demonstrate that Epstein-Barr virus nuclear protein 3B is not important for lymphocyte infection or growth transformation in vitro. *J Virol* 66(5): 2893–903.

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