

# HHV8 (K8) Peptide Pool

**Human herpesvirus 8 (K8) peptide pool for immune cell activation**

Catalog #100-1403

~25 µg (15 nmol)/peptide



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## Product Description

HHV8 (K8) Peptide Pool is a lyophilized mixture of 57 peptides from K8 alpha protein of human herpesvirus 8 (HHV8). The pool consists of 15-mer peptides with 11-amino-acid overlaps that cover amino acids 1 - 237 on K8. K8 is a basic leucine zipper (bZip) protein that associates with the lytic origin of HHV8 (Lin et al.) and is thought to play a role in lytic DNA replication as a trans-acting factor (AuCoin et al.). K8 has also been found to modulate the activity of the transcriptional transactivator K-Rta (Izumiya et al.) and has an autoregulatory function (Wang et al.). 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:	57
Source:	Human herpesvirus 8 (also known as Kaposi's sarcoma-associated herpesvirus [KSHV])
Accession Number:	O92597
Protein Name:	K8 alpha; Replication-associated protein (RAP)
Protein Sequence:	MPRMKDIPTKSSPGTDNSEKDEAVIEEDLSLNGQPFFTDNTDGGENEVSWTSSLLSTYVGCQPPAIPVCETVIDLTA PSQSGAPGDEHLPCSLNAETKFHIPDPSWTLSTHTPPRGPHISQQLPTRRSKRRLHRKFEEERLCTKAKQGAGRPVP ASVVKAEVCDQSHSPTRKQGRYGRVSSKAYTRQLQQALEEKDAQLCFLAARLEAHKEQIIFLRDMLMRMCQQPA SPTDAPLPPC
Gene Name:	K8
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

- AuCoin DP et al. (2004) Amplification of the Kaposi's sarcoma-associated herpesvirus/human herpesvirus 8 lytic origin of DNA replication is dependent upon a cis-acting AT-rich region and an ORF50 response element and the trans-acting factors ORF50 (K-Rta) and K8 (K-bZIP). *Virology* 318(2): 542–55.
- Izumiya Y et al. (2003) Kaposi's sarcoma-associated herpesvirus K-bZIP is a coregulator of K-Rta: physical association and promoter-dependent transcriptional repression. *J Virol* 77(2): 1441–51.
- Lin CL et al. (2003) Kaposi's sarcoma-associated herpesvirus lytic origin (ori-Lyt)-dependent DNA replication: identification of the ori-Lyt and association of K8 bZip protein with the origin. *J Virol* 77(10): 5578–88.
- Wang SE et al. (2003) Role of CCAAT/enhancer-binding protein alpha (C/EBP $\alpha$ ) in activation of the Kaposi's sarcoma-associated herpesvirus (KSHV) lytic-cycle replication-associated protein (RAP) promoter in cooperation with the KSHV replication and transcription activator (RTA) and RAP. *J Virol* 77(1): 600–23.

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