HPV16 (L1) Peptide Pool

Human papillomavirus 16 (L1) peptide pool for immune cell activation

Catalog #100-1392 ~25 µg (15 nmol)/peptide

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Product Description

HPV16 (L1) Peptide Pool is a lyophilized mixture of 124 peptides from major capsid protein L1 of human papillomavirus type 16 (HPV16). The pool consists of 15-mer peptides with 11-amino-acid overlaps that cover amino acids 1 - 505 on L1. L1 enters the nuclei of host cells via a Kap α2β1-mediated pathway (Nelson et al.). It cooperates with E2, another viral protein, to enhance viral DNA replication (Siddiqa et al.). L1 pentamers can assemble into virus-like particles (Chen et al., 2000; Chen et al., 2001). 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
- Immune monitoring
- T cell assays
- T cell expansion

Product Information

Number of Peptides:	124
Source:	Human papillomavirus type 16
Accession Number:	Q9WLQ6
Protein Name:	Major capsid protein L1
Protein Sequence:	MSLWLPSEATVYLPPVPVSKVVSTDEYVARTNIYYHAGTSRLLAVGHPYFPIKKPNNNKILVPKVSGLQYRVFRIHLP DPNKFGFPDTSFYNPDTQRLVWACVGVEVGRGQPLGVGISGHPLLNKLDDTENASAYAANAGVDNRECISMDYK QTQLCLIGCKPPIGEHWGKGSPCTNVAVNPGDCPPLELINTVIQDGDMVDTGFGAMDFTTLQANKSEVPLDICTSI CKYPDYIKMVSEPYGDSLFFYLRREQMFVRHLFNRAGAVGENVPDDLYIKGSGSTANLASSNYFPTPSGSMVTSDA QIFNKPYWLQRAQGHNNGICWGNQLFVTVVDTTRSTNMSLCAAISTSETTYKNTNFKEYLRHGEEYDLQFIFQLCKI TLTADVMTYIHSMNSTILEDWNFGLQPPPGGTLEDTYRFVTSQAIACQKHTPPAPKEDPLKKYTFWEVNLKEKFSAD LDQFPLGRKFLLQAGLKAKPKFTLGKRKATPTTSSTSTTAKRKKRKL
Gene Name:	L1
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

Chen XS et al. (2000) Structure of small virus-like particles assembled from the L1 protein of human papillomavirus 16. Mol Cell 5(3): 557–67.

Chen XS et al. (2001) Papillomavirus capsid protein expression in Escherichia coli: purification and assembly of HPV11 and HPV16 L1. J Mol Biol 307(1): 173–82.

Nelson LM et al. (2002) Nuclear import strategies of high risk HPV16 L1 major capsid protein. JBC 277(26): 23958–64.

Siddiqa A et al. (2015) The human papillomavirus type 16 L1 protein directly interacts with E2 and enhances E2-dependent replication and transcription activation. J Gen Virol 96(Pt 8): 2274–85.