HPV16 (E7) Peptide Pool

Human papillomavirus 16 (E7) peptide pool for immune cell activation

Catalog #100-1394 ~25 µg (15 nmol)/peptide

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Product Description

HPV16 (E7) Peptide Pool is a lyophilized mixture of 22 peptides from protein E7 of human papillomavirus type 16 (HPV16). The pool consists of 15-mer peptides with 11-amino-acid overlaps that cover amino acids 1 - 98 on protein E7. E7 is an oncoprotein that binds and mediates degradation of the tumor suppressor retinoblastoma protein (pRb) (Gonzalez et al.). E7 together with E6 demonstrated the ability to immortalize human keratinocytes in vitro, which likely has significance for HPVs oncogenic potential (Hawley-Nelson 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
- Immune monitoring
- T cell assays
- T cell expansion

Product Information

Number of Peptides:	22
Source:	Human papillomavirus type 16
Accession Number:	P03129
Protein Name:	E7
Protein Sequence:	MHGDTPTLHEYMLDLQPETTDLYCYEQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCKCDSTLRLCVQSTHVDIRTLEDLLMGTLGIVCPICSQKP
Gene Name:	E7
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

Gonzalez SL et al. (2001) Degradation of the retinoblastoma tumor suppressor by the human papillomavirus type 16 E7 oncoprotein is important for functional inactivation and is separable from proteasomal degradation of E7. J Virol 75(16): 7583–91.

Hawley-Nelson P et al. (1989) HPV16 E6 and E7 proteins cooperate to immortalize human foreskin keratinocytes. EMBO J 8(12): 3905–10.

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