

HPV16 E7 (86-93)

Cat. No.:	HY-P1778
CAS No.:	160212-93-1
Molecular Formula:	C ₃₇ H ₆₆ N ₈ O ₁₀ S
Molecular Weight:	815.03
Sequence:	Thr-Leu-Gly-Ile-Val-Cys-Pro-Ile
Sequence Shortening:	TLGIVCPI
Target:	HPV
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	HPV16 E7 (86-93) is a human leukocyte antigen (HLA)-A2.1 restricted HPV16 E7-derived peptide. HPV16 E7 (86-93) is immunogenic in cervical carcinomas ^{[1][2]} .
In Vitro	<p>HPV16 E7 (86-93) specific T cells are expandable upon IVS (in vitro stimulation) with cognate peptide-pulsed dendritic cells (DCs) and are reactive against peptide-pulsed targets or, in case of the E711-20 epitope-specific T cells, against HPV16 E7 expressing CaSki cell line^[1].</p> <p>For peptide HPV16 E7 (86-93), the only response against K562 cells pulsed with the corresponding peptide was significantly blocked by anti-HLA class I Ab w6/32, which was not the case for HPV16 E7 expressing tumor cell line CaSki. Precursor T cells specific for HPV16 E7 (86-93) peptide is able to differentiate, at least in vitro, into HPVspecific effector cells^[1].</p> <p>HPV16 E7 peptide-loaded autologous dendritic cells (DCs) are able to stimulate a specific cytotoxic CD8+ T-cell response^[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>
In Vivo	<p>HPV16 E7 (86-93) peptide in IVS culture has specific T cell expansion. The HPV16 E7 (86-93) specific T cells produced does not recognize naturally HPV16 E7 expressing cell line CaSki. HPV16 E7 (86-93) peptides also has similar observations in transgenic mice. The HPV16 E7 (86-93) peptide is able to induce cytotoxic T lymphocyte (CTL) responses if loaded on the antigen presenting HLA class I molecules, but that the peptide appears not to be processed or presented by HPV16 infected cells^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

[1]. Cheng WF, et al. Induction of human papillomavirus type 16-specific immunologic responses in a normal and an human papillomavirus-infected populations. Immunology. 2005 May;115(1):136-49.

[2]. Hoffmann TK, et al. T cells specific for HPV16 E7 epitopes in patients with squamous cell carcinoma of the oropharynx. Int J Cancer. 2006 Apr 15;118(8):1984-91.

Caution: Product has not been fully validated for medical applications. For research use only.

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