



Rabbit Anti-HPV16 E6 protein antibody

SL0990R

Product Name:	HPV16 E6 protein
Chinese Name:	人类乳头状瘤病毒16抗体
Alias:	E6; HPV16 E6 protein; Human Papilloma Virus; Human papillomavirus type 16 E6; Human papillomavirus type 16; Protein E6; E6 protein; HPV16 E6; HPV16-E6; VE6 HPV16.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,HPV16
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	11kDa
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	Synthetic peptide from the HPV16-E6 conjugated to KLH:85-158/158
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Human papilloma viruses (HPVs) can be classified as either high risk or low risk according to their association with cancer. HPV16 and HPV18 are the most common of the high risk group while HPV6 and HPV11 are among the low risk types. Approximately 90% of cervical cancers contain HPV DNA of the high risk types. Mutational analysis have shown that the E6 and E7 genes of the high risk HPVs are necessary and sufficient for HPV transforming function. The specific interactions of the

E6 and E7 proteins with p53 and pRB, respectively, correlate with HPV high and low risk classifications. The high risk HPV E7 proteins bind to pRB with a higher affinity than do the low risk HPV proteins, and only the high risk HPV E6 proteins form detectable complexes with p53 in vitro.

Function:

Plays a major role in the induction and maintenance of cellular transformation. Acts mainly as an oncoprotein by stimulating the destruction of many host cell key regulatory proteins. E6 associates with host E6-AP ubiquitin-protein ligase, and inactivates tumor suppressors TP53 and TP73 by targeting them to the 26S proteasome for degradation. In turn, DNA damage and chromosomal instabilities increase and lead to cell proliferation and cancer development. The complex E6/E6P targets several other substrates to degradation via the proteasome including host NFX1-91, a repressor of human telomerase reverse transcriptase (hTERT). The resulting increased expression of hTERT prevents the shortening of telomere length leading to cell immortalization. Other cellular targets including Bak, Fas-associated death domain-containing protein (FADD) and procaspase 8, are degraded by E6/E6AP causing inhibition of apoptosis. E6 also inhibits immune response by interacting with host IRF3 and TYK2. These interactions prevent IRF3 transcriptional activities and inhibit TYK2-mediated JAK-STAT activation by interferon alpha resulting in inhibition of the interferon signaling pathway.

Subunit:

Forms a complex E6-AP ubiquitin-protein ligase which interacts with human TP53. Binds to human FBLN1 and MPDZ (By similarity). Interacts with human NFX1 and MAGI3. Interacts with human IRF3; this interaction inhibits the establishment of antiviral state. Interacts with human TYK2; this interaction inhibits JAK-STAT activation by interferon alpha.

Subcellular Location:

Host nucleus matrix.

Similarity:

Belongs to the papillomaviridae E6 protein family.

SWISS:

P03126

Gene ID:

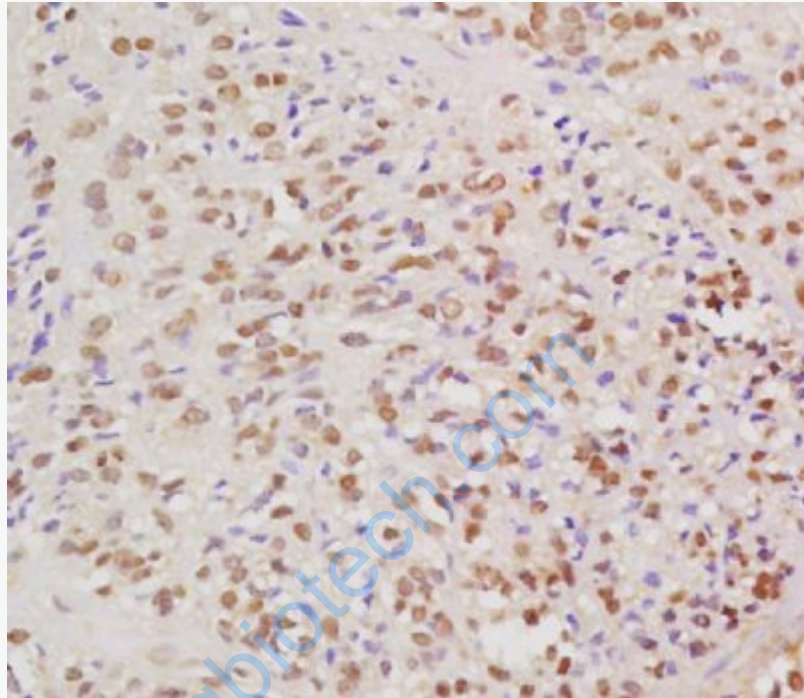
1489078

Database links:

[Entrez Gene: 1489078](#) HPV16 E6

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Tissue/cell: human cervical carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-HPV16-E6 Polyclonal Antibody, Unconjugated(SL0990R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining