

Rabbit Anti-HPV33 E7 antibody

SL10500R

Product Name HPV33 E7

Chinese Name 人类乳头状瘤病毒 33 抗体

Alias E7 protein [Human papillomavirus type 33]; Human Papilloma Virus; Human papillomavirus type 33; Protein 33; early protein E7 [Human papillomavirus type 33].

Research Area Tumour Bacteria and viruses

Immunogen Species Rabbit

Clonality Polyclonal

React Species (predicted:HPV33/HPV58)

WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA
(Paraffin sections need antigen repair)

Applications not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 11kDa

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human HPV33 E7: 2-50/97

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution (predicted:HPV33/HPV58)1M TBS(pH7.4) with 1% BSA, (predicted:HPV33/HPV58)3% Procl Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

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

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 the low risk types. Approximately 90% of cervical cancers contain HPV DNA of the high risk type.

analysis have shown that the E6 and E7 genes of the high risk HPVs are necessary and sufficient for 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.

Human papillomaviruses (HPV) are small DNA viruses which infect epithelia of the skin and mucous membranes. Over 100 types have been identified and they mostly cause a variety of benign lesions such as warts and verrucae. However, some subtypes, notably types 16 and 18, 31 and 33, have been confirmed as agents which cause cervical cancer.

Function:

E7 protein has both transforming and trans-activating activities. Disrupts the function of host retinoblastoma protein RB1/pRb, which is a key regulator of the cell cycle. Induces the disassembly of the E2F1/pRB complex factors from RB1, with subsequent transcriptional activation of E2F1-regulated S-phase genes. In the absence of the ability of RB1 to arrest the cell cycle is critical for cellular transformation, uncontrolled cellular proliferation induced by viral infection. Stimulation of progression from G1 to S phase allows the virus to efficiently use the cellular DNA replicating machinery to achieve viral genome replication. Interacts with HDAC1 and HDAC2, leading to histone deacetylation mediated by HDAC1 and HDAC2, leading to activation of transcription.

Subunit:

Homodimer. Homooligomer. Interaction with host RB1 induces the aberrant dissociation of RB1 from E2F1, thereby disrupting RB1's activity. Binds to CHD3 through its zinc-finger domain. Forms a complex with HDAC1, thereby altering the action of host histone deacetylation. A similar complex involving HDAC2 and HDAC2 might also form.

Similarity:

Belongs to the papillomaviridae E7 protein family.

SWISS:

P06429

Gene ID:

N/A

Database links:

[SwissProt: P06429](#) HPV33