SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-HPV16 E7 antibody

SL10202R

Product Name	HPV16 E7
Chinese Name	人乳头瘤病毒 16 型 E7 抗体
Alias	E7; HPV16 E7 protein; Human Papilloma Virus; Human papillomavirus type 16 E7; Human papillomavirus type 16 E7; Protein E7; Human Papillomavirus 16 (E7); HPV16 E7; E7 protein (HPV16); VE7_HPV16.
Research Area	Tumour Bacteria and viruses
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	HPV16
Applications	WB=1:500-2000,Flow-Cyt=1ug/Test 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 HPV16 E7 protein: 11-70/98
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. 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 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:
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 transcription factors from RB1, with subsequent transcriptional activation of E2F1-regulated S-phase genes. Inactivation of the ability of RB1 to arrest the cell cycle is critical for cellular transformation, uncontrolled cellular growth and 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. Interferes with histone deacetylation mediated by HDAC1 and HDAC2, leading to activation of transcription (By similarity).

Subunit:
Homodimer. Homooligomer. Interaction with host RB1 induces the aberrant dissociation of RB1-E2F1 complex thereby disrupting RB1's activity. Binds to CHD3 through its zinc-finger domain. Forms a complex with CHD3 and HDAC1, thereby altering the action of host histone deacetylation. A similar complex involving E7, CHD3 and HDAC2 might also form. Interacts with E2; this interaction inhibits E7 oncogenic activity.

Similarity:
Belongs to the papillomaviridae E7 protein family.

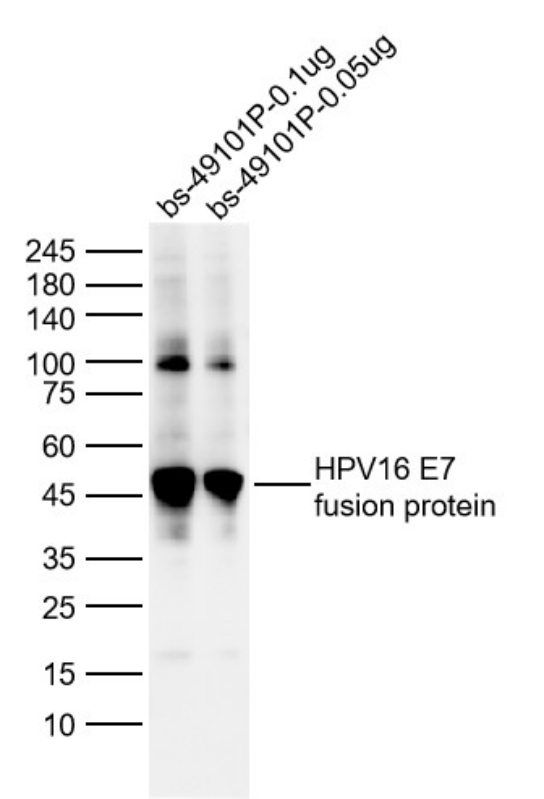
SWISS:
P03129

Gene ID:
1489079

Database links:
Entrez Gene: 1489079 HPV16

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Product Picture



Sample:

Lane 1: HPV16 E7 fusion protein (SL49101P) 0.1ug Lysates

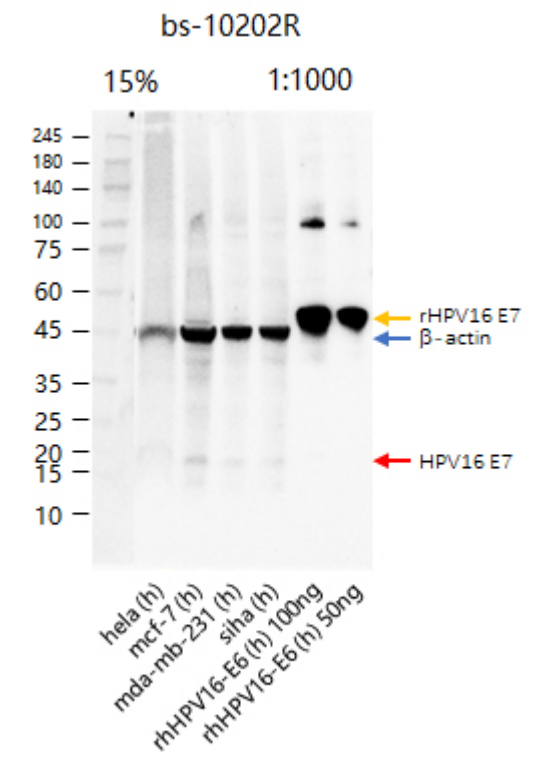
Lane 2: HPV16 E7 fusion protein (SL49101P) 5ug Lysates

Primary: Anti-HPV16 E7 (SL10202R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 11kDa

Observed band size: 50kDa



Sample:

hela (Human) Cell Lysate at 30 ug

mcf-7 (Human) Cell Lysate at 30 ug

mda-mb-231 (Human) Cell Lysate at 30 ug

siha (Human) Cell Lysate at 30 ug

recombinant HPV16-E7 protein (SL49101P) 100 ng

recombinant HPV16-E7 protein (SL49101P) 50 ng

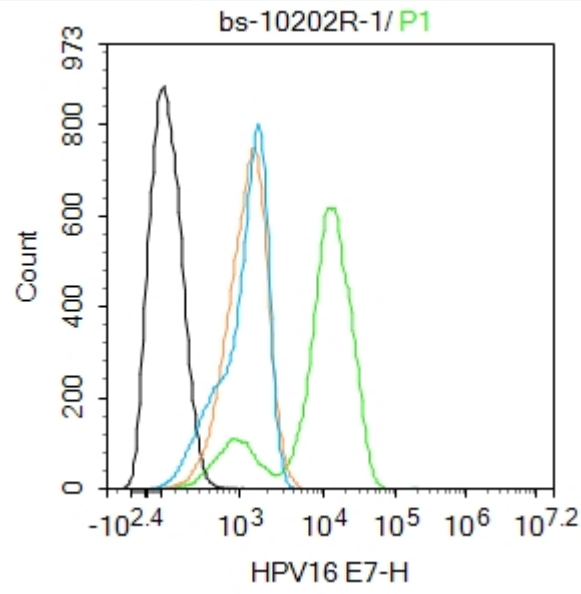
Primary: Anti-HPV16 E7 (SL10202R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 11 kD

Observed band size: 17-20 kD

SL49101P band size: 45 kD



Blank control（black line）:Hela.

Primary Antibody (green line): Rabbit Anti-HPV16 E7 antibody (SL10202R)

Dilution:1ug/Test;

Secondary Antibody（white blue line）: Goat anti-rabbit IgG-AF488

Dilution: 0.5ug/Test.

Isotype control（orange line）: Normal Rabbit IgG

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20℃, The cells

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.