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Rabbit Anti-HPV16 L2 antibody

SL8547R

Product Name:	HPV16 L2
Chinese Name:	人乳头瘤病毒16型L2抗体
Alias:	HPV16 L2; HPV16-L2; HPV-16; HPV-16 capsid; HPV16 capsid protein; HPV16 major capsid protein L2; Human papillomavirus type 16 L2; Human papillomavirus type 16 major capsid protein L2; Major capsid L2 protein; Major capsid protein; Major capsid protein L2; VL2_HPV16.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	HPV16
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	52kDa
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from HPV16 L2:1-100/473
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 papillomaviruses, particularly type 16 (designated HPV16), infect the genital tract and may lead to cervical cancer. Protection against HPV16 is thought to be provided by neutralizing antibodies directed to the major caspid protein L1 of HPV16. HPV16 L1 forms the pentameric assembly unit of the viral shell, and the binding of HPV16 L1 to the cell surface without the involvement of minor capsid protein L2 is

	believed to be the first step of HPV16 infection. The L1-binding domain located near the C-terminus of L2 binds L1 prior to completion of capsid assembly and is required for efficient encapsidation of the viral genome. In addition, the C-terminus of L1 is necessary for both DNA binding and DNA packaging. Expression of the late gene L1 is restricted to the upper layers of the infected epithelium. HPV16 L1 is able to package unrelated plasmid DNA in vitro and deliver the foreign DNA to eukaryotic cells with the subsequent expression of the encoded gene. L1 shows a diffuse nuclear distribution whereas L2 is localized to punctate nuclear regions identified as promonocytic leukemia protein oncogenic domains (PODs). Coexpression of L1 and L2 induces a relocalization of L1 into the PODs. **Function:** Minor protein of the capsid that localizes along the inner surface of the virion, within the central cavities beneath the L1 pentamers. Plays a role in capsid stabilization through interaction with the major capsid protein L1. Once the virion enters the host cell, escorts the genomic DNA into the nucleus, in particular by promoting virion endosomal escape. It is involved, through its interaction with host dynein, in the intracellular microtubule-dependent transport of viral capsid toward the nucleus. Mediates the viral genome import into the nucleus through binding to host importins. Once within the nucleus, L2 localizes viral genomes to PML bodies in order to activate early gene expression for establishment of infection. Later on, promotes late gene expression by interacting with the viral E2 protein and by inhibiting its transcriptional activation functions. During virion assembly, encapsidates the genome by direct interaction with the viral DNA. **Subunit:** Interacts with major capsid protein L1. Interacts with E2; this interaction inhibits E2 transcriptional activity but not the DNA replication function E2. Interacts with host GADD45GIP1. Interacts with host HSPA8; this interaction is required for L2 nuclear translocation. Interacts with host importins KPNB2 and KPNB3. Forms a complex with importin alpha2-beta1 heterodimers via interaction with the importin alpha2 adapter. Interacts with host DYNLT1; this interaction is essential for virus intracellular transport during entry. **Subcellular Location:** Virion. Host nucleus. Note=associated with ND10 nuclear bodies. **Post-translational modifications:** Highly phosphorylated (By similarity). **Similarity:** Belongs to the papillomaviridae L2 protein family. **SWISS:** P03107

	Gene ID: 1489081 **Database links:** **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.