

<input type="checkbox"/> Cat # 550-016-HPC	Human <b>Anti-(HPV6L16) IgG high positive</b> serum control (5X)	<b>SIZE: 0.5 ml</b>
<input type="checkbox"/> Cat # 550-016-NPC	Human <b>Anti-(HPV6L16) IgG negative/very low positive</b> serum control (5X)	<b>SIZE: 0.5 ml</b>

Human papillomavirus (HPV) is a virus from the papillomavirus family of viruses that is capable of infecting humans. Like all papillomaviruses, HPVs establish productive infections only in keratinocytes of the skin or mucous membranes. While the majority of the nearly 200 known types of HPV cause no symptoms in most people, some types can cause warts (verrucae), while others can lead to cancers of the cervix, vulva, vagina, and anus in women or cancers of the anus and penis in men. HPV infection is a cause of nearly all cases of cervical cancer. Over 120 HPV types have been identified and are referred to by number. Types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, and 59 are "high-risk" sexually transmitted HPVs. Two vaccines are available to prevent infection by some HPV types: **Gardasil**, marketed by Merck, and **Cervarix**, marketed by GlaxoSmithKline. Both vaccines utilize recombinant L1 proteins and protect against initial infection with HPV types 16 and 18, which cause most of the HPV associated cancer cases. Gardasil also protects against HPV types 6 and 11, which cause 90% of genital warts.

The HPV genome (dsDNA of ~8000 base pairs) is composed of six early (E1, E2, E3, E4, E6, and E7) and two late (L1 and L2) proteins. After the host cell is infected E1 and E2 are expressed first. In the upper layers of the host epithelium, the late genes L1 and L2 are transcribed/translated and serve as structural proteins that encapsidate the amplified viral genomes. The papillomavirus capsid also contains a viral protein known as L2, which is less abundant. L2 is of interest as a possible target for more broadly protective HPV vaccines.

HPV 6 I1 (protein accession #AAC53712, 501-aa), HPV11 L1 (protein accession #CCB84764, 503-aa) HPV16 L1 (protein accession #ACA14209; 531aa/505-aa), HPV18 L1 (protein accession #AAP20601; 568-aa/427-aa),

### Source of Controls

Human serum samples (adult, mixed sex) containing antibodies to HPV16L1 as tested by ADI ELISA (#550-116-PHG) at a dilution of 1:5 in the ELISA kit diluent. The positive serum tested positive with A450 values of >1.0. The negative serum produced A450 values of <0.3. Control sera are provide in Tris buffer, pH 7.5 containing 0.1% proclin-300 (preservative) in liquid. Store at 4oC for up to 3 months at 4oC or frozen in suitable size aliquots.

All human derived material has been tested negative for HIV, HCV, and HbsAg. Nevertheless, all precautions should be taken and samples be treated as potentially hazardous.

### Suggested Use

Recommended as positive and negative controls for anti-HPV16L1 protein IgG by ELISA. The controls may or may not be antibody positive against the whole HPV16 or other HPVs.

Use 1:5 diluted and 100 ul/well or dilute as necessary depending upon the sensitivity of the detection.

**References: General References:** Neepier MP (1996) Gene 180, 1-6; Narechania A (2005) J. Virol. 79, 15503-15510

\*This product is for In vitro research use only.

### Related material available from ADI

550-006-HPC	Human Anti-Human Papilloma Virus 6 late protein L1 (HPV6L1) IgG high positive serum control (5X)
550-006-NPC	Human Anti-Human Papilloma Virus 6 late protein L1 (HPV6L1) IgG negative/very low positive serum control (5X)
550-011-HPC	Human Anti-Human Papilloma Virus 11 late protein L1 (HPV6L11) IgG high positive serum control (5X)
550-011-NPC	Human Anti-Human Papilloma Virus 11 late protein L1 (HPV6L11) IgG negative/very low positive serum control (5X)
550-016-HPC	Human Anti-Human Papilloma Virus 16 late protein L1 (HPV6L16) IgG high positive serum control (5X)
550-016-NPC	Human Anti-Human Papilloma Virus 16 late protein L1 (HPV6L16) IgG negative/very low positive serum control (5X)
550-018-HPC	Human Anti-Human Papilloma Virus 18 late protein L1 (HPV6L18) IgG high positive serum control (5X)
550-018-NPC	Human Anti-Human Papilloma Virus 18 late protein L1 (HPV6L18) IgG negative/very low positive serum control (5X)
550-100-PHG	Human Anti-Human Papilloma Virus 6+11+16+18 late proteins L1 (HPVL1) IgG Combo ELISA kit, quantitative, 96 tests
550-106-PHG	Human Anti-Human Papilloma Virus 6 late protein L1 (HPV6L1) IgG ELISA kit, quantitative, 96 tests
550-111-PHG	Human Anti-Human Papilloma Virus 11 late protein L1 (HPV11L1) IgG ELISA kit, quantitative, 96 tests
550-116-PHG	Human Anti-Human Papilloma Virus 16 late protein L1 (HPV16L1) IgG ELISA kit, quantitative, 96 tests
550-118-PHG	Human Anti-Human Papilloma Virus 18 late protein L1 (HPV18L1) IgG ELISA kit, quantitative, 96 tests
550-200-PRG	Rabbit Anti-Human Papilloma Virus 6+11+16+18 late proteins L1 (HPVL1) IgG Combo ELISA kit, quantitative, 96 tests
550-206-PRG	Rabbit Anti-Human Papilloma Virus 6 late protein L1 (HPV6L1) IgG ELISA kit, quantitative, 96 tests
550-211-PRG	Rabbit Anti-Human Papilloma Virus 11 late protein L1 (HPV11L1) IgG ELISA kit, quantitative, 96 tests
550-216-PRG	Rabbit Anti-Human Papilloma Virus 16 late protein L1 (HPV16L1) IgG ELISA kit, quantitative, 96 tests
550-218-PRG	Rabbit Anti-Human Papilloma Virus 18 late protein L1 (HPV18L1) IgG ELISA kit, quantitative, 96 tests
550-300-PMG	Mouse Anti-Human Papilloma Virus 6+11+16+18 late proteins L1 (HPVL1) IgG Combo ELISA kit, quantitative, 96 tests
550-306-PMG	Mouse Anti-Human Papilloma Virus 6 late protein L1 (HPV6L1) IgG ELISA kit, quantitative, 96 tests
550-311-PMG	Mouse Anti-Human Papilloma Virus 11 late protein L1 (HPV11L1) IgG ELISA kit, quantitative, 96 tests
550-316-PMG	Mouse Anti-Human Papilloma Virus 16 late protein L1 IgG (HPV16L1) ELISA kit, quantitative, 96 tests
550-318-PMG	Mouse Anti-Human Papilloma Virus 18 late protein L1 (HPV18L1) IgG ELISA kit, quantitative, 96 tests
550-016-HPC	140603A

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