MIKROGEN DIAGNOSTIK

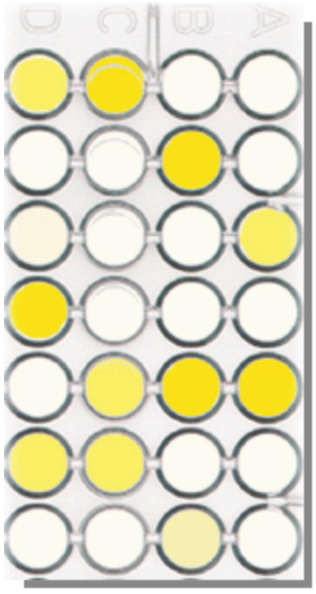
Human Papillomavirus

NEW

*recom*Well HPV 16 /18 /45

Qualitative Enzyme immunoassay for detection of E7 oncoproteins from Human Papillomavirus (HPV) types 16, 18, and 45 in cervical smears.

Human Papillomaviruses (HPV) are sexually transmitted viruses frequently occurring all over the world. Almost everyone comes into contact with at least one HP virus during the course of his/her life. In most cases, the infection heals on its own. In rare cases, chronic persistent infections can cause health problems. So far, more than 200 virus types are known of which approximately 40 affect the genitals. Some of these viruses are responsible for the formation of benign genital warts while other types, the so-called high risk types, contribute significantly to the development of cervical, anal, and penile carcinoma and cancer in the area of mouth and throat. The high risk HPV types 16 and 18 are found in 70% of cervical cancer. However, type 45 is also highly associated with risk, particularly for adenocarcinoma, a very aggressive type of cervical cancer.

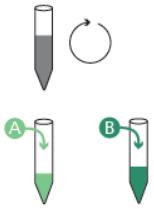


- HPV E7 oncoprotein shares functional similarities (tumor initiation and induction of genomic instability) with such proteins as adenovirus E1A and SV40 large tumor antigen.
- HPV E7 plays a central role in both the viral life cycle and carcinogenic transformation.
- HPV E7 disrupts the association between cellular differentiation and proliferation in normal epithelium, allowing for viral replication in cells that would no longer be in the dividing population.

***recom*Well HPV 16/ 18/ 45: Secure and simple ELISA format**

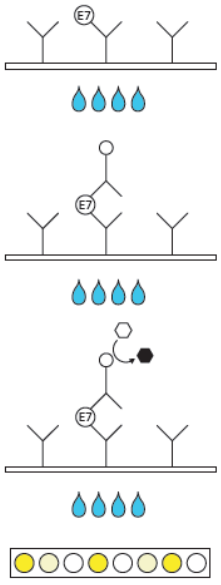
- clear and qualitative results based on the measurement of absorbances.
- break-aparts: processing of up to 96 individual samples per run possible.
- Ready-to-use reagents, automation possible.

Preparation of Samples & Test Principle and Procedure



Sample preparation.
Before performing the *recom*Well HPV 16/18/45, the cervical smears (stored in ThinPrep® PreservCyt Solution) are processed as follows:

Centrifugation	Transfer 15 ml sample material into a screw cap tube with conical bottom. Centrifuge for **15 minutes** at 600g. Carefully remove excess supernatant.
Incubation	Add 500 µl lysis buffer A, vortex, and incubate for **30 minutes** at room temperature. Add 500 µl lysis buffer B and vortex.



Indirect sandwich test.
Monoclonal rabbit anti-HPV 16 E7, 18 E7 and 45 E7 antibodies are fixed in the wells of a microtiter plate.

1st Incubation	Add prepared patient sample, and incubate for **1 hour at room temperature.** wash 3 times
2nd Incubation	Add ready-to-use secondary anti-HPV E7 antibody, and incubate for **1 hour at room temperature.** wash 3 times
3rd Incubation	Add ready-to-use streptavidin conjugate, and incubate for **1 hour at room temperature.** wash 6 times
Color reaction	Add ready-to-use TMB solution and incubate **30 minutes at room temperature.** Stop the substrate solution with H_3PO_4 and measure the absorbence at 450 nm.

Turn around time: approx. 4h

Product #7904 ***recom*Well HPV 16/18/45** **Store at +2°-+8°C**
Reagents for 96 determinations

For more information visit http://www.mikrogen.de/english/deutschland/home.html

Available in the U.S. For Research Use Only. Not intended for diagnostic procedures.