

# ZytoFast® HPV Screening Probe



## Background

The ZytoFast® HPV Screening Probe is designed for the detection and discrimination of human papillomavirus (HPV) DNA in paraffin-embedded tissue sections or cell samples.

At least 50 percent of sexually active men and women acquire some form of genital HPV infection at some point in their lives. Most of the approx. 30 identified genital HPV types, predominantly types 6 and 11, are called "low-risk" types, and may cause mild Pap test abnormalities or genital warts. Until now, approximately 10–15 HPV types are associated with lesions that can progress to cancer. Among those are the HPV types 16/18/31/33/35/39/45/51/52/56/58/59/66/68/82.

These cancer-associated HPV types are designated as high-risk HPV (hr-HPV) types. The infection with the HPV hr-types can lead to development of cancer of the cervix, vulva, vagina, anus, or penis. The majority of malignant cervical carcinomas (approx. 70%) occur as a result of infections with HPV types 16 or 18.

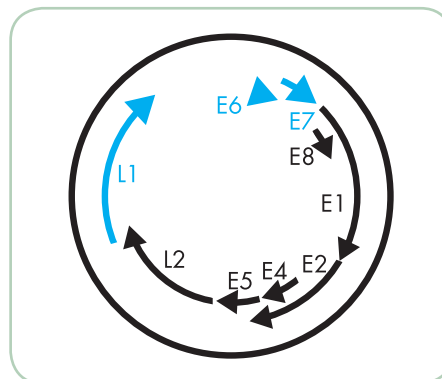
### References

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## Probe Description

ZytoFast® HPV Screening Probe is composed of:

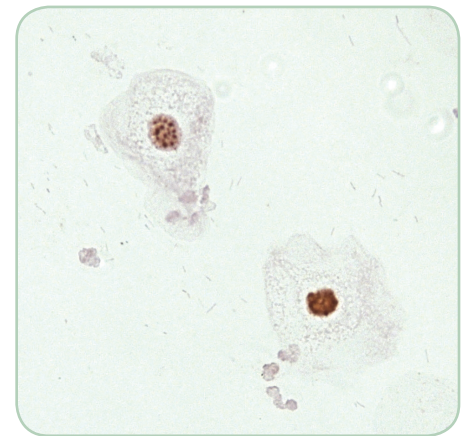
- Digoxigenin-labeled oligonucleotides (~ 2.6 ng/µl) specific for HPV type 6/11/16/18/31/33/35/39/45/51/52/56/58/59/66/68/82, which target DNA sequences encoding for HPV 6/11/16/18/31/33/35/39/45/51/52/56/58/59/66/68/82 proteins E6, E7, and/or L1.
- The probe also targets the respective RNA sequences of E6, E7, and/or L1 proteins, which are expressed during some stages of infection.
- Formamide based hybridization buffer



Schematic representation of the HPV genome with E and L open reading frames. Genomic regions targeted by ZytoFast® HPV specific oligonucleotides are indicated in blue.

## Results

A positive reactivity for HPV DNA in epithelial cells is indicated by a distinctly stained nucleus. Due to the detection of HPV DNA as well as E6, E7, and/or L1 RNAs, depending on the infection stage, cytoplasmic staining might be observed additionally. Depending on the detection chemistry that is used, colored precipitates, which can be clearly distinguished from the background, will be dark brown when using DAB as substrate for the detection.



HPV infected cells with signals from integrated and episomal HPV hybridized with the ZytoFast® HPV Screening Probe, detected with the ZytoFast® PLUS CISH Implementation Kit HRP-DAB.

Prod. No.	Product	Label	Tests* (Volume)
T-1144-400	ZytoFast HPV Screening Probe (specific for HPV type 6/11/16/18/31/33/35/39/45/51/52/56/58/59/66/68/82) CE IVD	DIG	40 (400 µl)
<b>Related Products</b>			
T-1063-40	ZytoFast PLUS CISH Implementation Kit HRP-DAB CE IVD		40
Incl. Heat Pretreatment Solution EDTA, 500 ml; Pepsin Solution, 4 ml; 20x Wash Buffer TBS, 4x 50 ml; Mouse-anti-DIG, 4 ml; Anti-Mouse-HRP-Polymer, 4 ml; DAB Solution A, 0.3 ml; DAB Solution B, 10 ml; Nuclear Blue Solution, 20 ml; Mounting Solution (alcoholic), 4 ml			

\* Using 10 µl probe solution per test. IVD labeled products are only available in certain countries. All other countries research use only! Please contact your local dealer for more information.