



Human Papilloma Virus (HR)
in situ hybridization probe

0,8 ml, 40 reactions

For detection of high risk **human papilloma virus type 16, 18, 31, 33, und 35** by *in situ* hybridization

FOR RESEARCH USE ONLY

Product No.: **T-1040**

Manufacturer: ZytoVision GmbH, Fischkai 1, D-27572 Bremerhaven

Phone: +49 (0) 471-483 230 0, Telefax: +49 (0) 471-483 250 9

info@zytovision.com, <http://www.zytovision.com>

Biotin labelled oligonucleotide probe for detection of high risk human papilloma virus type 16, 18, 31, 33, and 35 by *in situ* hybridization, ready to use

Product description

- Content:** 0,8 ml (40 reactions) HPV-HR *in situ* hybridization (ISH) probe in hybridization buffer. The probe contains oligonucleotides directed against the L1 coding sequence of HPV type 16, 18, 31, 33 und 35.
- Product No.:** T-1040 (HPV HR-ISH probe)
- Specificity:** The HPV HR-ISH probe is to be used for detection of high risk human papilloma virus type 16, 18, 31, 33, und 35 in paraffin-embedded tissue or cells by *in situ* hybridization.
- Storage/Stability:** The HPV HR-ISH probe must be stored at temperatures between 2°C- 8°C, in the dark, and remains stable until the expiry date stated on the packaging.
- Use:** This product is designed for research purposes only and not for use in diagnostic applications!
- Safety Precautions:** Read the operating instructions prior to use!
- Do not use the reagents once the use-by date has expired!
- This product contains substances (in low concentrations and volumes) that are harmful to health (formamide, kathon). Avoid any direct contact with the reagents. Take appropriate protective measures (use disposable gloves, protective glasses and lab garments). The following risk and safety phrases apply to: R61 May cause harm to the unborn child. S53 Avoid exposure - obtain special instructions before use. S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label, where possible)!

If reagents come into contact with skin, rinse skin immediately with copious quantities of water!

Material safety data sheet is available on request for professional user!

Principle of the method:

The presence of certain nucleic acid sequences in cells or tissue can be ascertained with in situ hybridisation using tagged gene probes. The hybridization results in duplex formation of sequences present in the test object and the specific gene probe.

The duplex formation (in this case of [HPV 16, 18, 31, 33, or 35](#) sequences in the testing material) is indirectly detected using an enzyme-conjugated antibody targeting the tags of the oligonucleotides. In addition to the staining of nuclei, cytoplasmic detection of [HPV-RNA](#) might be found in some cases, because of different stability of RNA-DNA and DNA-DNA hybrids.

Instructions:

Homogenise the [HPV HR-ISH](#) probe and bring to 37°C. The pre-treatment of the test item (deparaffination, proteolysis, postfixation, prehybridization) is determined by the user. The tissue / cell section must not dry out during hybridization. For hybridization pipet 15-25 µl [HPV HR-ISH](#) probe onto the section. Cover the section with a coverslip and seal. After heat denaturation (10 mins at 75°C) the slide is incubated for 1 h at 37°C. The next processing (e.g. washing, detection, counterstain, embedding) is again, determined by the user. For safe and simple processing, we recommend the use of our hybridization system ([T-1011](#)), which exhibits a special compatibility with the [HPV HR-ISH](#) probe.

Our experts are available to answer your questions.

Literature:

Seedorf,K., Krammer,G., Durst,M., Suhai,S. and Rowekamp,W.G.: Human papillomavirus type 16 DNA sequence. Virology 145 (1), 181-185 (1985)

Cole,S.T. and Danos,O.: Nucleotide sequence and comparative analysis of the human papillomavirus type 18 genome. Phylogeny of papillomaviruses and repeated structure of the E6 and E7 gene products. J. Mol. Biol. 193 (4), 599-608 (1987)

Goldsborough,M.D., DiSilvestre,D., Temple,G.F. and Lorincz,A.T.: Nucleotide sequence of human papillomavirus type 31: a cervical neoplasia-associated virus. Virology 171 (1), 306-311 (1989)

Cole,S.T. and Streeck,R.E.: Genome organization and nucleotide sequence of human papillomavirus type 33, which is associated with cervical cancer. J. Virol. 58 (3), 991-995 (1986)

Marich,J.E., Pontsler,A.V., Rice,S.M., McGraw,K.A. and Dubensky,T.W.: The phylogenetic relationship and complete nucleotide sequence of human papillomavirus type 35 .Virology 186 (2), 770-776 (1992)

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ZytoVision GmbH

Fischkai 1

D-27572 Bremerhaven

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