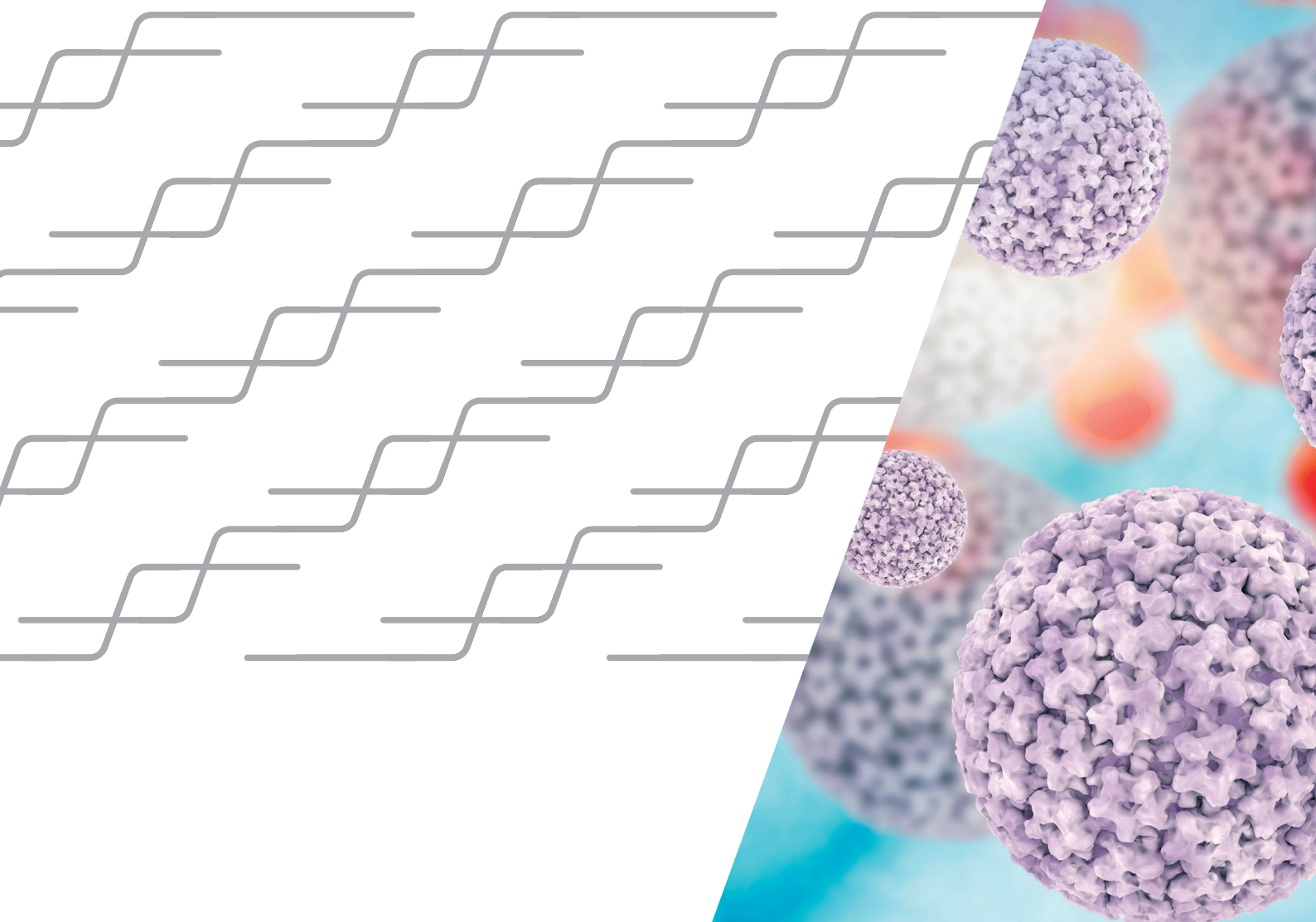


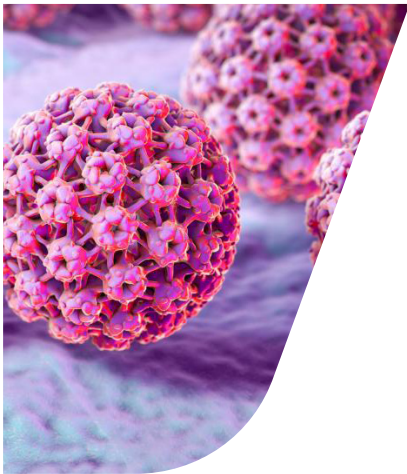


Real-time PCR Diagnostic Kits

Human Papillomaviruses

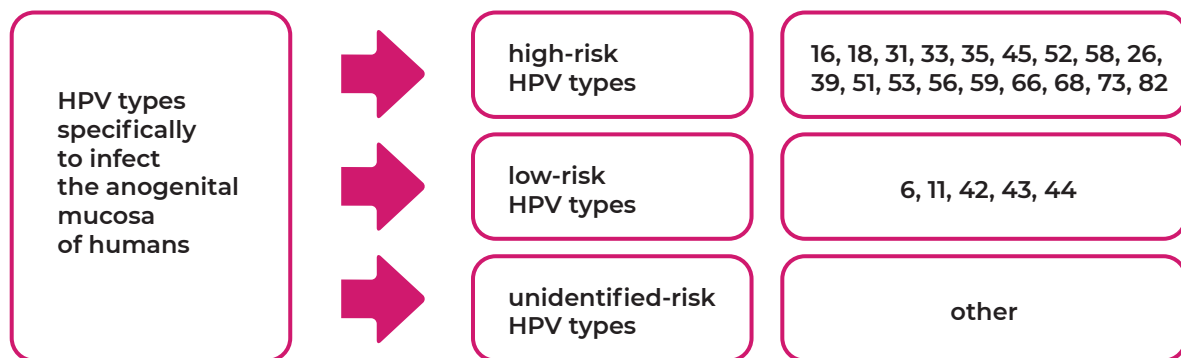


Human Papillomaviruses (HPV)



Human Papillomaviruses typically infect the skin and mucosal surfaces. There are more than 200 different types: approximately 100 of them are fully sequenced and 40 types are known to infect the anogenital mucosa of humans. The highest rates of newly acquired HPV infections are observed in young women, peaking at the age soon after the onset of sexual activity. HPV types detected in the anogenital tract are subdivided into low-risk and high-risk types, based on their relative risk to cause the rare complication such as neoplasia. Low-risk HPV types are typically found in low-grade squamous intraepithelial lesions as well as anogenital warts. The high-risk HPVs are found in low- and high-grade lesions, such as cancers of cervix and other types of cancer in anogenital sites (vulva, vagina, anus).

HPV types frequently detected in the anogenital tract



Collectively, HPV 16 and 18 are consistently responsible for approximately 70% of all cervical cancer cases worldwide.

HPV testing relies on molecular methods



- HPV testing is incorporated into cervical cancer screening in various combinations with Papanicolaou (Pap) test.
- Polymerase chain reaction an assay can be used for primary screening and genotyping of high-risk HPV-types.
- HPV DNA detection is a negative predictor. Current research is investigating the degree of impact on unknown-risk HPV types on clinical important outcomes.

The RealBest assay kits for diagnostics of HPV

Nucleic acids extraction kits

Sample type:
Urogenital swabs



Kits for the detection of pathogen's DNA using real-time PCR

- High specificity and sensitivity
- Universal and rapid amplification protocol for all infections
- Multiplex detection
- Validation of urogenital swabs (quantitative detection of human DNA)

Features of RealBest kits



- Easy-to-use: just add a sample of eluted DNA into 0.2 ml white tubes with Lyophilized Ready Master Mix;
- Reliability of analysis: kit contains Noncompetitive Internal Control sample;
- High sensitivity: 100 copies (genome-equivalents) per sample;
- Universal and rapid amplification protocol for all infections;
- Convenience of storage and transportation: no freezing required, transportation up to 26 °C for no more than 10 days is acceptable

Compatible thermal cyclers: CFX96 (Bio-Rad, USA), DTprime (DT-96), DTlite (DNA-Technology, Russia), Gentier 96E/R (Xi'an TianLong, Science and Technology Co., Ltd., China) and analogues.

It is possible to use other thermal cyclers with similar technical characteristics, but their application requires additional validation.



Kits for nucleic acids extraction

Cat. №	Kit Name	Method	Number of tests
8896	RealBest extraction 100 A kit for manual DNA/RNA extraction from whole blood, blood serum/plasma, leukocyte blood fraction, biopsy material, cerebrospinal fluid, urine, feces, epithelial cell specimens, environmental materials (tick suspensions, water samples).	Precipitation with magnetic particles	48 (8x6)
8883	RealBest UniMag A kit for automated DNA/RNA extraction from blood serum (plasma), leukocyte blood fraction, biopsy material, cerebrospinal fluid, urine (DNA extraction only), feces, epithelial cells specimens, environmental materials (tick suspensions, water samples).	Sorption on magnetic particles	96 (4x24)
8889	RealBest DNA-extraction 3 (variant 6x16) A kit for manual DNA extraction from blood serum/plasma, urine, epithelial cell specimens.	Sorption on magnetic particles	96 (6x16)
8878	RealBest DNA-extraction 3 (variant 2x48) A kit for automated DNA extraction from blood serum/plasma, urine, epithelial cell specimens.	Sorption on magnetic particles	96 (2x48)
8899	RealBest DNA-express A kit for manual DNA extraction from epithelial cell specimens from the cervical canal, urethra, vagina, posterior laryngeal wall, conjunctiva; semen, saliva, urine.	Thermolysis during 15 min	100



Kits for HPV detection by real-time PCR

Cat. №	Kit Name	Detection Channels	Number of tests
8447 CE	RealBest DNA HPV 44 Detection of HPV type 44 DNA	FAM, ROX	96
8448 CE	RealBest DNA HPV 66 (set 1) Detection of HPV type 66 DNA	FAM, ROX	96
8488 CE	RealBest DNA HPV 68 (set 1) Detection of HPV type 68 DNA	FAM, ROX	96
8475 CE	RealBest DNA HPV 6/11 (set 1) Differential detection of HPV types 6 and 11 DNA	FAM, ROX, HEX	96
8473 CE	RealBest DNA HPV 16/18 (set 1) Differential detection of HPV types 16 and 18 DNA	FAM, ROX, HEX	96
8459	RealBest DNA HPV 26/51 (set 1) Differential detection of HPV types 26 and 51 DNA	FAM, ROX, HEX	96
8471 CE	RealBest DNA HPV 31/33 (set 1) Differential detection of HPV types 31 and 33 DNA	FAM, ROX, HEX	96
8469 CE	RealBest DNA HPV 35/45 (set 1) Differential detection of HPV types 35 and 45 DNA	FAM, ROX, HEX	96
8446 CE	RealBest DNA HPV 6/11/44 Differential detection of HPV types 6, 11, and 44 DNA	FAM, ROX, HEX, Cy5	96
8449 CE	RealBest DNA HPV 26/53/66 Differential detection of HPV types 26, 53, and 66 DNA	FAM, ROX, HEX, Cy5	96
8451 CE	RealBest DNA HPV 68/73/82 Differential detection of HPV types 68, 73, and 82 DNA	FAM, ROX, HEX, Cy5	96
8498 CE	RealBest HPV OncoScreen Detection of high-risk HPV types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68 DNA with differentiation of HPV 16 and 18	FAM, ROX, HEX, Cy5	96
8444 CE	RealBest DNA HPV HR screen (set 1) Detection of high-risk HPV types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, and 68 DNA	FAM, ROX, HEX	96
8478 CE	RealBest DNA HPV HR genotype quantitative (set 1) Differential detection and quantification of high-risk HPV types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, and 59 DNA	FAM, ROX, HEX, Cy5	96
8479 CE	RealBest DNA HPV HR genotype (set 1) Differential detection of high-risk HPV types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, and 59 DNA	FAM, ROX, HEX, Cy5	96

Kits for HPV detection contain the lyophilized Ready Master Mix into 0.2 ml white tubes of the 96-tube plate.