REALQUALITY Human Papilloma Virus (HPV) and other Sexually Transmitted Infections (STI)

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REALQUALITY kits allow the fast detection of Human Papilloma Virus (HPV) and other pathogens causing Sexually Transmitted Infections (STI).



Human Papilloma Virus (HPV) Chlamydia trachomatis (CT) Neisseria gonorrhoeae (NG) Mycoplasma genitalium (MG) Mycoplasma hominis (MH) Ureaplasma parvum (UP) Ureaplasma urealyticum (UU) Trichomonas vaginalis (TV)





REALQUALITY RQ-HPV HR Multiplex RQ-HPV Screen



Kits for detection and identification of high-risk genotypes of the *Human Papillomavirus* by Real-Time PCR (regions E6-E7).

REALQUALITY RQ-HPV HR Multiplex and RQ-HPV Screen have been developed according to the latest guidelines for HPV DNA assays for diagnostic screening. The assays detect the 14 high-risk HPV types and allow direct identification of the HPV genotypes 16 and 18.

The assays use single-tube multiplexed PCR including an internal control. This guarantees ease of use and makes the assays suitable for high-throughput testing.

To ensure maximum diagnostic reliability these kits target the E6 and E7 oncogenes.

One of the key events of HPV-induced oncogenesis is integration of the HPV genome into the host genome, which may lead the loss of a portion of its sequence. However, the E6 and E7 genes have been found to remain unaffected.

For this reason, the use of a diagnostic system that is based on the detection of the HPV E6 and E7 genes drastically reduces the risk of false-negative results owed to viral integration.

REALQUALITY RQ-HPV Screen is clinically validated according to Meijer guidelines (lacobellis et al., 2018; Meijer C. et al., 2009).

PRODUCT CHARACTERISTICS:

- Amplified region: E6 and E7 genes.
- Genotyping: HPV 16 and 18.
- Detected high-risk genotypes: HPV 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66 and 68.
- **Ready-to-use PCR mastermix**, includes **dUTP/ UNG** system to prevent carry over contamination.
- Internal control: Amplification of ß-globin gene in multiplex with pathogen genes.
- Positive Controls included.
- Easy interpretation of results with **AB Genius Report 3 software**.

Validated instruments: REALQUALITY RO-HPV HR Multiplex

- Applied Biosystems 7500 Fast/Fast Dx Real-Time PCR System (Applied Biosystems).

- CFX96 Real-Time PCR Detection System (Bio-Rad).

- LightCycler® 480 Real-Time PCR System version II (Roche).

- Rotor-Gene Q MDx (QIAGEN). REALQUALITY RQ-HPV Screen

- Applied Biosystems 7500 Fast/Fast Dx Real-Time PCR System (Applied Biosystems).

- AriaDx Real-Time PCR System (Agilent Technologies).

SPECIMENS:

 DNA extracted from cervical, vaginal, urethral, oral and anal swabs; from urethral, vaginal and foreskin biopsy tissue; and from vaginal secretion and FFPE samples.

SHELF LIFE:

• 18 months.



FLUOROPHORES:

| Colour | Target |
|--------|---|
| Yellow | HPV 16 |
| Red | HPV 18 |
| Green | HPV 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68 |
| Orange | ß-globin |

ORDERING INFORMATION:

| CODE | PRODUCT | FORMAT |
|--------------|--|-------------|
| RQ-97-4M/6M | REALQUALITY RQ-HPV HR Multiplex | 50/100 test |
| RQ-97R-4M/6M | REALQUALITY RQ-HPV HR Multiplex (for LC480 II - Roche) | 50/100 test |
| | | |
| RQ-123-4M/6M | REALQUALITY RQ-HPV Screen* | 50/100 test |
| | | |

* Validated according to Meijer guidelines.

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REALQUALITY RQ-HPV **HR/LR** Multiplex



Kit for detection and identification of high-risk and low-risk genotypes of the *Human Papillomavirus* by Real-Time PCR (regions E6-E7).

REALQUALITY RQ-HPV HR/LR is an IVD that allows exhaustive diagnostic analysis. Using only two multiplexed PCRs that include internal controls, the assay detects the 14 high-risk HPV types, the 6 HPV types that are classified by the IARC as possibly high-risk and the two most common low-risk HPV genotypes. In addition, the kit allows direct identification of the main causative agents for HPV-related cancer, the HPV genotypes 16 and 18, as well as HPV 6 and HPV 11, two low-risk HPV types of particular clinical interest.

To ensure maximum diagnostic reliability these kits target the E6 and E7 oncogenes.

One of the key events of HPV-induced oncogenesis is integration of the HPV genome into the host genome, which may lead the loss of a portion of its sequence. However, the E6 and E7 genes have been found to remain unaffected.

For this reason, the use of a diagnostic system that is based on the detection of the HPV E6 and E7 genes drastically reduces the risk of false-negative results owed to viral integration.

PRODUCT CHARACTERISTICS:

- Amplified region: E6 and E7 genes.
- Genotyping: HPV 16, 18, 6 and 11.
- Detected high-risk genotypes: HPV 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66 and 68.
- Detected possibly high-risk genotypes: HPV 26, 53, 67, 70, 73, 82.
- Ready-to-use PCR mastermixes, include dUTP/ UNG system to prevent carry over contamination.
- **Internal control**: Amplification of ß-globin gene in multiplex with pathogen genes.
- Positive Controls included.
- Easy interpretation of results with **AB Genius Report 3 software**.
- Validated instruments:

- Applied Biosystems 7500 Fast/Fast Dx Real-Time PCR System (Applied Biosystems).

- CFX96 Real-Time PCR Detection System (Bio-Rad). - LightCycler® 480 Real-Time PCR System version II (Roche).

- Rotor-Gene Q MDx (QIAGEN).

SPECIMENS:

 DNA extracted from cervical, vaginal, urethral, oral and anal swabs; from urethral, vaginal and foreskin biopsy tissue; and from vaginal secretion and FFPE samples.

SHELF LIFE:

18 months.

FLUOROPHORES:

| React | ion 1 (RX-1) |
|--------|---|
| Colour | Target |
| Yellow | HPV 16 |
| Red | HPV 18 |
| Green | HPV 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68 |
| Orange | ß-globin |
| | |

| React | ion 2 (RX-2) |
|--------|----------------------------|
| Colour | Target |
| Yellow | HPV 6 |
| Red | HPV 11 |
| Green | HPV 26, 53, 67, 70, 73, 82 |
| Orange | ß-globin |

ORDERING INFORMATION:

| CODE | PRODUCT | FORMAT |
|--------------|---|----------------|
| RQ-99-4M/6M | REALQUALITY RQ-HPV HR/LR Multiplex | 50/100 test |
| RQ-99R-4M/6M | REALQUALITY RQ-HPV HR/LR Multiplex (for LC480 II - Roche) | 50/100 test |

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REALQUALITY RQ-Multi HPV Detection



Kit for detection of 28 high-risk and low-risk genotypes of the *Human Papillomavirus* by Real-Time PCR (regions E6-E7).

REALQUALITY RQ-Multi HPV Detection is an IVD that allows exhaustive diagnostic analysis. Using only two multiplexed PCRs that include internal controls the assay detects 14 high-risk, 6 possibly high-risk and 8 low-risk HPV genotypes. In addition, the kit allows direct identification of the main causative agents for HPV-related cancer, the HPV genotypes 16 and 18.

To ensure maximum diagnostic reliability these kits target the E6 and E7 oncogenes.

One of the key events of HPV-induced oncogenesis is integration of the HPV genome into the host genome, which may lead the loss of a portion of its sequence. However, the E6 and E7 genes have been found to remain unaffected.

For this reason, the use of a diagnostic system that is based on the detection of the HPV E6 and E7 genes drastically reduces the risk of false-negative results owed to viral integration.

PRODUCT CHARACTERISTICS:

- Amplified region: E6 and E7 genes.
- Genotyping: HPV 16 and 18.
- Detected high-risk genotypes: HPV 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68.
- Detected possibly high-risk genotypes: HPV 26, 53, 67, 70, 73, 82.
- Detected low-risk genotypes: HPV 6, 11, 40, 42, 43, 44, 55, 83.
- Ready-to-use PCR mastermixes, include dUTP/ UNG system to prevent carry over contamination.
- **Internal control**: Amplification of ß-globin gene in multiplex with pathogen genes.
- Positive Controls included.
- Easy interpretation of results with **AB Genius Report 3 software**.
- Validated instruments:

- Applied Biosystems 7500 Fast/Fast Dx Real-Time PCR System (Applied Biosystems).

- CFX96 Real-Time PCR Detection System (Bio-Rad). - LightCycler® 480 Real-Time PCR System version II (Roche).

SPECIMENS:

 DNA extracted from cervical, vaginal, urethral, oral and anal swabs; from urethral, vaginal and foreskin biopsy tissue; and from vaginal secretion and FFPE samples.

SHELF LIFE:

18 months.



FLUOROPHORES:

| React | ion 1 (RX-1) |
|--------|---|
| Colour | Target |
| Yellow | HPV 16 |
| Red | HPV 18 |
| Green | HPV 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68 |
| Orange | ß-globin |
| | |

| React | ion 2 (RX-2) |
|--------|----------------------------|
| Colour | Target |
| Yellow | HPV 40,42,43, 44, 55, 83 |
| Red | HPV 6, 11 |
| Green | HPV 26, 53, 67, 70, 73, 82 |
| Orange | ß-globin |

ORDERING INFORMATION:

| CODE | PRODUCT | FORMAT |
|---------------|---|-------------|
| RQ-103-4M/6M | REALQUALITY RQ-Multi HPV Detection | 50/100 test |
| RQ-103R-4M/6M | REALQUALITY RQ-Multi HPV Detection (for LC480 II - Roche) | 50/100 test |

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REALQUALITY RQ-**STI CT/NG/MG**



Kit for detection of Chlamydia trachomatis, Neisseria gonorrhoeae, Mycoplasma genitalium by Real-Time PCR.

| Pathogen | Target Region |
|-----------------------|--|
| STI CT/NG/MG | C Real time mix |
| Chlamydia trachomatis | MOMP geneCryptic plasmid |
| Neisseria gonorrhoeae | porA pseudo gene multi-copy opa gene |
| Mycoplasma genitalium | MgPa gene |

The kit includes the use of a double amplification target for *Chlamydia trachomatis* and *Neisseria gonorrhoeae*. This approach guarantees the maximum diagnostic reliability for the identification of variants and a high analytical sensitivity, since the cryptic plasmid of CT and the opa gene of NG are present in multiple copies (respectively from 7 to 10 copies per CT organism and up to 11 copies per NG organism).

PRODUCT CHARACTERISTICS:

- Detection and identification of **3 STI** causing pathogens by one-tube multiplex PCR.
- Two target regions for both C. trachomatis and N. gonorrohoeae increase the clinical specificity and sensitivity of the test.
- Ready-to-use PCR mastermix, includes dUTP/ UNG system to prevent carry over contamination.
- **Internal control**: amplification of ß-globin gene in multiplex with pathogens genes.
- **Positive controls** included.
- Easy interpretation of results with **AB Genius Report 3 software**.
- Validated instruments:

- AriaDx Real-Time PCR System (Agilent Technologies).
- Applied Biosystems 7500 Fast Dx Real-Time PCR System (Applied Biosystems).

- CFX96 Real-Time PCR Detection System (Bio-Rad).

- Rotor-Gene Q MDx (QIAGEN).

SPECIMENS:

 DNA extracted from cervico-vaginal, urogenital, urethral swabs and urine. It has also been tested on DNA extracted from prostatic secretion, rectal swab, seminal fluid and urethral biopsy.

SHELF LIFE:

• 18 months.

FLUOROPHORES:

| Colour | Target | | |
|--------|----------------------------|---|---|
| Green | Chlamydia trachomatis (CT) | | |
| Yellow | Neisseria gonorrhoeae (NC) | • | • |
| Red | Mycoplasma genitalium (MG) | • | |
| Orange | ß-globin | | |

ORDERING INFORMATION:

| CODE | PRODUCT | FORMAT |
|--------------|--------------------------------|-------------|
| RQ-107-4M/6M | REALQUALITY RQ-STI CT/NG/MG | 50/100 test |

This product uses technology patented by Biosearch Technologies, licensed for use in Human Molecular Diagnostic applications.





REALQUALITY RQ-SevenSTI



Kit for detection of Chlamydia trachomatis, Neisseria gonorrhoeae, Mycoplasma genitalium, Mycoplasma hominis, Trichomonas vaginalis, Ureaplasma urealyticum and Ureaplasma parvum by Real-Time PCR.

| Pathogen | Target Region | Pathogen | Target Region |
|----------------------------|--|------------------------|------------------|
| STI CT/NG/MG Real time mix | | STI TV/MH/UU/ | UP Real time mix |
| Chlamydia trachomatis | MOMP gene | Trichomonas vaginalis | Repeated set |
| | Cryptic plasmid | Mycoplasma hominis | • 16s rRNA |
| Neisseria gonorrhoeae | porA pseudo genemulti-copy opa gene | Ureaplasma urealyticum | Urease gene |
| Mycoplasma genitalium | • MgPa gene | Ureaplasma parvum | Urease gene |

The kit includes the use of a double amplification target for *Chlamydia trachomatis* and *Neisseria gonorrhoeae*. This approach guarantees the maximum diagnostic reliability for the identification of variants and a high analytical sensitivity, since the cryptic plasmid of CT and the opa gene of NG are present in multiple copies (respectively from 7 to 10 copies per CT organism and up to 11 copies per NG organism).

PRODUCT CHARACTERISTICS:

- Detection and identification of **7 STI** causing pathogens by two-tube multiplex PCR.
- Two target regions for both C. trachomatis and
 N. gonorrohoeae increase the clinical specificity and sensitivity of the test.
- Ready-to-use PCR mastermix, includes dUTP/ UNG system to prevent carry over contamination.
- **Internal control**: amplification of ß-globin gene in multiplex with pathogens genes.
- Positive controls included.
- Easy interpretation of results with **AB Genius Report 3 software**.
- Validated instruments:
 - AriaDx Real-Time PCR System (Agilent Technologies).
 - CFX96 Real-Time PCR Detection System (Bio-Rad).
 - Rotor-Gene Q 6plex (QIAGEN).

SPECIMENS:

• DNA extracted from urogenital, cervical-vaginal and urethral swabs and urine.

SHELF LIFE:

18 months.

FLUOROPHORES:

| Reaction 1 (RX-1) | | |
|-------------------|----------------------------|--|
| Colour | Target | |
| Green | Chlamydia trachomatis (CT) | |
| Yellow | Neisseria gonorrhoeae (NG) | |
| Red | Mycoplasma genitalium (MG) | |
| Orange | ß-globin | |
| | | |

Reaction 2 (RX-2)

| Colour | Target | |
|--------|-----------------------------|--|
| Green | Trichomonas vaginalis (TV) | |
| Yellow | Ureaplasma urealyticum (UU) | |
| Red | Mycoplasma hominis (MH) | |
| Orange | Ureaplasma parvum (UP) | |

ORDERING INFORMATION:

| CODE | PRODUCT | FORMAT |
|--------------|----------------------------|-------------|
| RQ-127-4M/6M | REALQUALITY RQ-SevenSTI | 50/100 test |

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