



VIASURE Sexually Transmitted Diseases Real Time PCR Detection Kit

Sexually transmitted infections (STIs) represent a group of diseases that affect the sexual and reproductive health of millions of people, being a public problem of interest. Etiological agents responsible for STIs include fungi, bacteria, parasites and viruses. Some of these microorganisms are eliminated after a period of time, while others are recurrent and some remain in the body asymptomatically, allowing the progress of the disease and generating consequences such as inflammations of the genito-urinary tract, infertility and even the development of cancer.

VIASURE Sexually Transmitted Diseases Real Time PCR Detection Kit is designed for the specific identification and differentiation of:

- Trichomonas vaginalis infection has been associated with vaginitis, cervicitis and urethritis, premature rupture of membranes and premature delivery in pregnant women. Trichomonas vaginalis infection has also been associated with an increased risk of HIV acquisition and transmission in women.
- Mycoplasma hominis colonizes the lower urogenital tract and is associated with urogenital infections, particularly bacterial vaginosis and non-gonococcal urethritis. It is also involved in extra genital infections, such as postpartum or post-abortion fever, in post-cesarean wound infections or after a hysterectomy.
- Mycoplasma genitalium is a facultative anaerobic organism and a recognized cause of nongonococcal urethritis in men. In women, *M. genitalium* has been associated with cervicitis, endometritis, pelvic inflammatory disease (PID), infertility, susceptibility to human immunodeficiency virus (HIV), and adverse birth outcomes, indicating a consistent relationship with female genital tract pathology.
- Ureaplasma spp. are often isolated from human genital mucosa of individuals with a lack of symptoms. In humans, two major species, namely Ureaplasma parvum and Ureaplasma urealyticum are part of the genital flora of men and women and are present in almost 70% of sexually active population. These bacteria cause inflammation and lead to chorioamnionitis, preterm deliveries, and premature rupture of membranes.
- Neisseria gonorrhoeae is an obligate human pathogen and is the etiological agent of gonorrhea. Syndromes include cervicitis in women, and urethritis, pharyngitis and proctitis in both sexes.
- Chlamydia trachomatis is a small intracellular bacterium that requires living cells to multiply. In males, this can cause epididymitis, which is not thought to be an important cause of long-term sequelae. However, in females, upper tract infection can result in pelvic inflammatory disease (PID), a spectrum of clinical disorders involving infection and inflammation of the uterus, fallopian tubes, ovaries, or adjacent perfoneum.

VIASURE Real Time PCR Detection Kits

VIASURE Sexually Transmitted Diseases Real Time PCR Detection Kit

VIASURE Sexually Transmitted Diseases Real Time PCR Detection Kit is designed for the specific identification and differentiation of Neisseria gonorrhoeae, Chlamydia trachomatis, Mycoplasma genitalium, Trichomonas vaginalis, Ureaplasma urealyticum, Ureaplasma parvum and/or Mycoplasma hominis, in urogenital, endocervical and urine samples from patients with signs and symptoms of sexually transmitted diseases (STDs).

After DNA isolation, the identification of the STDs is performed by the amplification of a conserved region of the T. vaginalis-specific 2-kb repeated sequence, (Trichomonas vaginalis), ureasa gene (Ureaplasma urealyticum and Ureaplasma parvum), yidC gene (Mycoplasma hominis), porA and Opa genes (Neisseria gonorrhoeae), a region within ORF2 of the chlamydial plasmid (Chlamydia trachomatis) and MgPa adhesin gene (Mycoplasma genitalium), using specific primers and a fluorescent–labelled probe.

VIASURE Sexually Transmitted Diseases Real Time PCR Detection Kit contains in each well all the components necessary for real time PCR assay (specific primers/probes, dNTPS, buffer, polymerase and retrotranscriptase) in an stabilized format, as well as an internal control to monitor PCR inhibition.

References:

VIASURE Sexually Transmitted Diseases Real Time PCR Detection Kit:

6 x 8-well strips, low profile	_vs-std106L
6 x 8-well strips, high profile	VS-STD106F
12 x 8-well strips, low profile	_VS-STD112L
12 x 8-well strips, high profile	_VS-STD112H
18 x 4-well strips, Rotor-Gene®_	_VS-STD136



CerTest Biotec, S.L.

Pol. Industrial Río Gállego II · Calle J, N°1 50840, San Mateo de Gállego, Zaragoza (Spain) Tel. (+34) 976 520 354 · Fax (+34) 976 106 268 certest@certest.es | viasure@certest.es www.certest.es VIASURE Sexually Transmitted Diseases Real Time PCR Detection Kit has a detection limit of ≥10 DNA copies per reaction.



Figure 1. Dilution series of Trichomonas vaginalis (10⁻-10¹ copies/rn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (Multiplex reaction mix Trichomonas vaginalis, Ureaplasma urealyticum, Ureaplasma parvum & Mycoplasma hominis, channel FAM).

Figure 2. Dilution series of Ureaplasma urealyticum (10[°]-10[°] copies/xn) template run on the Bio-Rad CFX96 Touch[™] Real-Time PCR Detection System (Multiplex reaction mix Trichomonas vaginalis, Ureaplasma urealyticum, Ureaplasma parvum & Mycoplasma hominis, channel HEQ.

Figure 3. Dilution series of Uraaplasma parvum (10[°]-10[′] copies/no) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (Multiplex reaction mix Trichomonas vaginalis, Ureaplasma urealyticum, Ureaplasma parvum & Mycoplasma hominis, channel ROX.

Figure 4. Dilution series of Mycoplasma hominis (10⁷-10¹ copies/sm) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (Multiplex reaction mix Trichomonas vaginalis, Ureaplasma urealyticum, Ureaplasma parvum & Mycoplasma hominis, channel Cy5).

Figure 5. Dilution series of Chlamydia trachomatis (10[°]-10[°] copies/rw) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (Mutiplex reaction mix Neisseria gonorrhoeae, Chlamydia trachomatis & Mycoplasma genitalium, channel FAM).

Figure 6. Dilution series of Mycoplasma genitalium (10[°]-10¹ copies/m) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (Multiplex reaction mix Neisseria gonorthoeae, Chlamydia trachomatis & Mycoplasma genitalium, channel HEX).

Figure 7. Dilution series of Neisseria gonorrhoeae (10°-10' copies/xn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (Multiplex reaction mix Neisseria gonorrhoeae, Chlamydia trachomatis & Mycoplasma genitalium, channel ROX).

For more information and use procedure, read the instructions for use included in this product.



VIASURE/STD0520EN

Modification rights reserved. All rights reserved. © CerTest Biotec, S.L. The products, services and data set out in this document may suffer changes and/or variations on the texts and pictures shown.