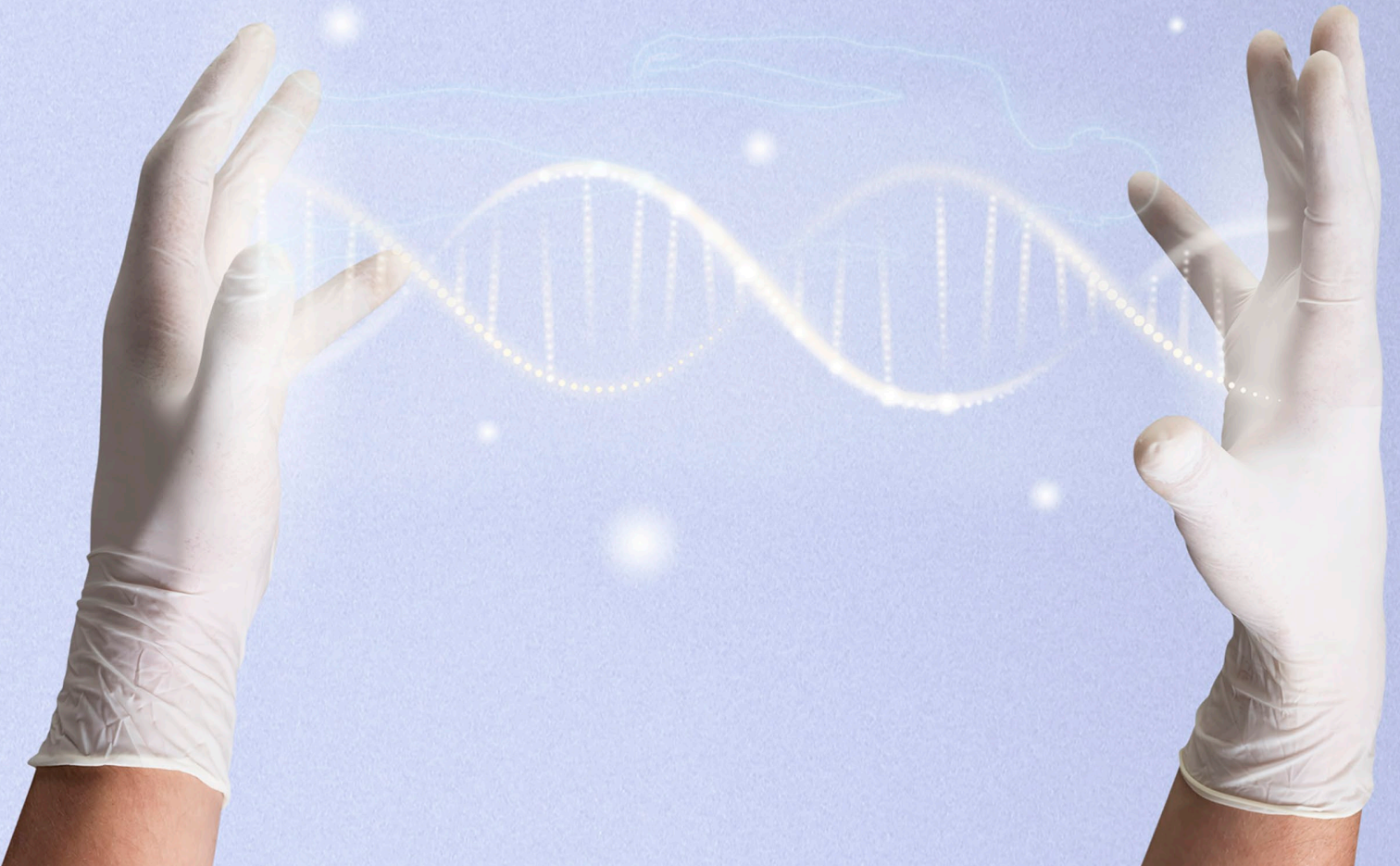


NxBIOTECH

2023

**PRODUCT
CATALOG**

**Nx STIs qPCR
Detection Kits**





NxBiotech

is a biotech company based in Poland, operating in the field of genetic laboratory diagnostics and data analysis. We are an inventor and manufacturer of genetic tests. NxBiotech's research and development activities focus on increasing accuracy and reducing the time of genetic analysis. Our patented technology procedure allows for the development of any new genetic test within 4 weeks.

NxBiotech quality standards are certified according to ISO 13485:2016, which formalizes recognition of our competence to produce, analyze and distribute nucleic acids, in-vitro diagnostic assays (IVD's) and applications. The company participates in proficiency tests. Proficiency tests are an important part of ongoing qualification/validation.

Processes are described in Standard Operating Procedures. They are reviewed periodically. We maintain a clean and hygienic manufacturing area. The processes are clearly defined, validated and controlled. Instruments are qualified. The requalification period is defined. Instrument-related test documents are archived. Changes that affect the quality are validated if necessary. In cases where the quality cannot be covered by verification, the production process is validated. Records demonstrate that all the steps required by the defined procedures and instructions are in fact taken. Deviations are investigated and documented. Records of manufacture that enable the complete history of a batch to be traced are retained in a comprehensible and accessible form.

Audits are performed to confirm that activities within the different processes correspond to internal and external demands, as well as to investigate the efficiency and suitability of the quality management system. Internal audits verify that the Company's policy is implemented throughout the entire organisation. Supplier qualification is performed regularly.

Products that fall under the scope of European Directive 98/79/EC on In Vitro Diagnostic Device have been specified as CE IVD in the catalogue. This enables us to comply with the general requirements and safety regulations of CE. Find CE IVD logo on the inside pages as shown here:





Sexually transmitted infections (STIs) also known as sexually transmitted diseases (STDs), involve the transmission of a pathogen between sexual partners through different routes of sexual contact; either oral, anal, or vaginal. STIs become a concern and burden on healthcare systems, as many infections go untreated and lead to potentially serious complications.

In an effort to expedite the diagnosis and treatment of sexually transmitted infections, NxBiotech has developed qPCR Detection Kits that detect the individual pathogens causing STIs.

The STI tests amplify and detect a specific DNA sequence of an infectious pathogen in purified genomic samples. The STI assay includes forward and reverse primers to amplify a specific DNA sequence, and a FAM dye-labelled probe to recognize a unique site in the amplified DNA sequence.

During the real-time PCR reaction, the DNA polymerase cleaves the specific FAM dye-labelled probe at the 5' end and separates the reporter dye from the quencher dye only when the probe hybridizes to the target DNA sequence. This cleavage results in the fluorescent signal generated by the cleaved reporter dye, which is monitored real-time by a PCR detection system. Detecting the infectious pathogen is based on detecting a signal from the FAM-dye.

6-27

Nx STIs

Nx Chlamydia trachomatis
Nx Gardnerella vaginalis
Nx HPV 16/18
Nx Mycoplasma genitalium
Nx Mycoplasma hominis
Nx Neisseria gonorrhoeae
Nx Trichomonas vaginalis
Nx Ureaplasma parvum
Nx Ureaplasma urealyticum
Nx Monkeypox virus



Nx STIs

Nx Chlamydia trachomatis qPCR Detection Kit



DESCRIPTION

Chlamydia trachomatis is a bacterium that causes chlamydia, which can manifest in various ways, including: trachoma, lymphogranuloma venereum, nongonococcal urethritis, cervicitis, salpingitis and pelvic inflammatory disease. *Chlamydia trachomatis* is the most common infectious cause of blindness and the most common sexually transmitted bacterium. Different types of *Chlamydia trachomatis* cause different diseases. The most common strains cause disease in the genital tract, while other strains cause disease in the eye or lymph nodes.

REF. NUMBER

NXSTI01CT

PATHOGENE

Chlamydia trachomatis

KIT CONTENTS

1 × 2x MasterMix qPCR Probe
1 × Oligos Set
1 × Positive Control
1 × Nuclease-Free Water

QUANTITY

100 reactions

STORAGE CONDITIONS

-25°C to -15°C

CERTIFICATES



DID YOU KNOW...?

Chlamydia is one of the most commonly transmitted sexually diseases and at the same time one of the leading causes of infertility in the world. Symptoms of the disease may appear 1-3 weeks after infection, but chlamydia is often asymptomatic. Every year there are about 131 million people diagnosed with chlamydia.

WHY KNOWLEDGE ABOUT *CHLAMYDIA TRACHOMATIS* IS IMPORTANT?

Chlamydia infection does not always cause symptoms, but it has serious consequences for the health of women and men, including frequent infections, joint problems, inflammation of the urethra, uterus and epididymis. It may carry a risk of miscarriage, early delivery and infertility. Symptoms may not appear until several weeks after infection.

HOW THE TEST IS PERFORMED?

In the diagnosis of *Chlamydia trachomatis*, PCR techniques are primarily used to confirm or exclude the presence of the pathogen in the tested material. The advantage of PCR over other methods is unambiguous – the sensitivity and specificity of the test is over 99%, and the method allows the detection of a very small number of bacteria. Genetic material analysis using our reagents is fast and accurate. Following the IFU included in the kit, the lab technician can easily interpret the results. The reaction lasts about 45 min, and the temperature-time profile is selected so that the laboratory can analyze several genes simultaneously using one device. Ready-to-use reagents are included in the kit. It is enough for the lab technician to add each of them in the right proportion and the reaction is ready. Quickly, easily and professionally.

WHY IS IT WORTH DOING A GENETIC TEST?

Quick diagnosis will enable the implementation of treatment. Only by means of a genetic test are we able to detect the presence of the pathogen with 100% accuracy.

WHAT CAN BE DONE AFTER THE TEST RESULT?

Treatment for both men and women is similar. Appropriate antibiotics prescribed by a doctor are used. The partner must also undergo treatment in order to prevent reinfection and the spread of the disease. After using the drugs, it is best to make a follow-up visit, you can also return the sample for testing. Once treated, however, the infection has a tendency to recur.

Nx STIs

Nx *Gardnerella vaginalis* qPCR Detection Kit



DESCRIPTION

Gardnerella vaginalis is a species of Gardnerella, a genus of bacteria belonging to the family Bifidobacteriaceae. *Gardnerella vaginalis* has been identified as being a commensal in the intimate areas as part of the microbiome in healthy women. In addition, this pathogen may latently infect the chorionic villi tissues of pregnant women, thereby impacting pregnancy outcome.

REF. NUMBER

NXSTI01GV

PATHOGENE

Gardnerella vaginalis

KIT CONTENTS

1 × 2x MasterMix qPCR Probe
 1 × Oligos Set
 1 × Positive Control
 1 × Nuclease-Free Water

QUANTITY

100 reactions

STORAGE CONDITIONS

-25°C to -15°C

CERTIFICATES



DID YOU KNOW...?

Infection with *Gardnerella vaginalis* affects many women, but up to 75% of cases may be asymptomatic. The main causes of infection are frequent changes of sexual partners and inadequate hygiene of intimate zones. Normal vaginal microflora in women is characterized by the presence of *Lactobacillus* bacteria, which are responsible for the acidic environment, and a very small amount of *Gardnerella* bacteria.

WHY KNOWLEDGE ABOUT *GARDNERELLA VAGINALIS* IS IMPORTANT?

Among the most common symptoms of women infected with the *Gardnerella vaginalis* bacteria are vaginal discharge, which is characterized by a rather unpleasant odor, determined by many by the smell of rotten fish. The discharge is usually white or grayish in color. Vaginal discharge very often contains a small amount of leukocytes. Another visible symptom may be a disturbance in the pH of the vaginal mucus. It is significantly different from the correct one and has values greater than 4.5. Some patients also report symptoms such as burning, irritation and itching of intimate zones and pain during intercourse. Infection with *Gardnerella vaginalis* during pregnancy can lead to numerous complications. The most common are bleeding, chronic inflammation of the urinary tract. If left untreated, bacterial vaginosis can lead to the development of infections of other organs in the pelvic region and urethra. Occasionally, having too much *Gardnerella vaginalis* can cause premature labor.

HOW THE TEST IS PERFORMED?

In the diagnosis of *Gardnerella vaginalis*, PCR techniques are primarily used to confirm or exclude the presence of the pathogen in the tested material. The advantage of PCR over other methods is unambiguous – the sensitivity and specificity of the test is over 99%, and the method allows the detection of a very small number of bacteria. Genetic material analysis using our reagents is fast and accurate. Following the IFU included in the kit, the lab technician can easily interpret the results. The reaction lasts about 45 min, and the temperature-time profile is selected so that the laboratory can analyze several genes simultaneously using one device. Ready-to-use reagents are included in the kit. It is enough for the lab technician to add each of them in the right proportion and the reaction is ready. Quickly, easily and professionally.

WHY IS IT WORTH DOING A GENETIC TEST?

Quick diagnosis will enable the implementation of treatment. Only by means of a genetic test are we able to detect the presence of the pathogen with 100% accuracy.

WHAT CAN BE DONE AFTER THE TEST RESULT?

Treatment for both men and women is similar. Appropriate antibiotics prescribed by a doctor are used. The partner must also undergo treatment in order to prevent reinfection and the spread of the disease. After using the drugs, it is best to make a follow-up visit, you can also return the sample for testing. Once treated, however, the infection has a tendency to recur.

Nx STIs

Nx HPV 16/18 qPCR Detection Kit



DESCRIPTION

The molecular test designed for identification of the Human papillomavirus (HPV) DNA. HPV is a pathogen belonging to Papillomaviridae family. The virus is transmitted mainly through sexual contact and causes changes to the skin and mucous membranes (throat, mouth, and genitals). Oncogenic types (high-risk HPV) are particularly dangerous because in the case of long-lasting infection they can lead to the development of cervical cancer. Nearly all cervical cancer is due to HPV and two strains – HPV16 and HPV18 – account for 70% of cases.

REF. NUMBER

NXSTI01HP

PATHOGENE

HPV 16/18

KIT CONTENTS

1 × 2x MasterMix qPCR Probe
1 × Oligos Set
1 × Positive Control
1 × Nuclease-Free Water

QUANTITY

100 reactions

STORAGE CONDITIONS

-25°C to -15°C

CERTIFICATES



DID YOU KNOW...?

HPV infection is caused by a DNA virus – Human papillomavirus from the Papillomaviridae family. The virus is transmitted mainly through sexual contact but also through sustained direct skin-to-skin contact. Occasionally it can spread from mother to her baby during pregnancy. Human papillomavirus infects epidermal and squamous epithelial cells. There are over 200 types of the virus. The types of HPV described as low-oncogenic, i.e. having a low potential to cause cancer, are types 6, 11, 40, 42, 43, 44, 54, 61, 72 and are responsible for the formation of skin and genital warts. Types 6 and 11 are responsible for the formation of condyloma. The oncogenic types are: 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59.

HOW SERIOUS IS HPV?

Most people who become infected with HPV do not know they have it. Usually, the body's immune system gets rid of the disease. HPV sexually transmitted infection results in skin changes – warts, which are usually located in the genital area. The disease is dangerous especially for women because it may be associated with an increased risk of cervical cancer. Many HPV infections cause no symptoms and 90% resolve spontaneously within two years. The most serious consequence of long lasting HPV infection is development of dysplastic changes which over time lead to cervical cancer. That is why early diagnosis is of great importance.

HOW THE TEST IS PERFORMED?

HPV 16/18 test is based on the molecular method, during the course of which genetic material of Human papillomavirus is detected. Genetic material analysis is fast and accurate. Thanks to the ready-to-use reagents included in the kit, the preparation of the reaction mixture is quick and does not require extensive lab work. Interpretation of the obtained results is easy thanks to the product IFU included in the kit.

WHY IS IT WORTH DOING A GENETIC TEST?

Early detection of the virus especially high-risk type gives a chance to avoid development of cancer. If found early, abnormal cells can be treated before they become cancerous. It's much easier to prevent cervical cancer than to treat it once it develops.

WHAT CAN BE DONE AFTER THE TEST RESULT?

The test result should be consulted with a doctor who will implement the appropriate therapy. Also HPV vaccination should be considered for cervical cancer prevention. Moreover, patients infected with HPV must be aware of the risk of infection sexual partners and the possible need for appropriate periodic examinations (cytology, colposcopy).

Nx STIs

Nx *Mycoplasma genitalium* qPCR Detection Kit



DESCRIPTION

Mycoplasma genitalium is a sexually transmitted, pathogenic bacterium that lives on the mucous epithelial cells of the urinary and genital tracts in humans. It causes urethritis in both men and woman, and also cervicitis and pelvic inflammation in women. It presents clinically similar symptoms to that of *Chlamydia trachomatis* infection and has shown higher incidence rates, compared to both *Chlamydia trachomatis* and *Neisseria gonorrhoeae* infections in some populations. Furthermore, it also increases the risk factor for HIV spread with higher occurrences in those previously treated with the azithromycin antibiotics.

REF. NUMBER

NXSTI01MG

PATHOGENE

Mycoplasma genitalium

KIT CONTENTS

1 × 2x MasterMix qPCR Probe
 1 × Oligos Set
 1 × Positive Control
 1 × Nuclease-Free Water

QUANTITY

100 reactions

STORAGE CONDITIONS

-25°C to -15°C

CERTIFICATES



DID YOU KNOW...?

Mycoplasma genitalium is an unusual bacterium that lacks a cell wall and is responsible for genito-urinary infections in both sexes. It causes a sexually transmitted bacterial infection that is very often asymptomatic. This prevents effective diagnosis and treatment implementation. The complications of *Mycoplasma genitalium* infection can be serious, including infertility.

WHY KNOWLEDGE ABOUT MYCOPLASMA GENITALIUM IS IMPORTANT?

Mycoplasma genitalium in women usually causes bacterial vaginosis, with symptoms characteristic of this disease, such as itching around the perineum, burning urethra, profuse, abnormal discharge, prolonged menstrual bleeding or bleeding between periods, discomfort during intercourse. Among the symptoms of *Mycoplasma genitalium* infection in women are also those indicative of urethritis. *Mycoplasma genitalium* infections are particularly dangerous during pregnancy. In men, genital mycoplasma most often causes the so-called non-gonococcal urethritis, which manifests itself in the manner typical of inflammation of the urethra: unusual discharge from the urethra, stinging or burning in the urethra, pain or burning when urinating, discomfort during intercourse.

HOW THE TEST IS PERFORMED?

The test is performed using a molecular biology technique – the PCR method (polymerase chain reaction), which detects the genetic material of the bacteria. Due to the high requirements of the microorganism for in vitro culture, PCR may be a reliable and simpler method of confirming the infection. SNP analysis using our reagents is fast and accurate. Following the IFU included in the kit, the lab technician can easily interpret the results. The reaction lasts about 45 min, and the temperature-time profile is selected so that the laboratory can analyze several genes simultaneously using one device. Ready-to-use reagents are included in the kit. It is enough for the lab technician to add each of them in the right proportion and the reaction is ready. Quickly, easily and professionally.

WHY IS IT WORTH DOING A GENETIC TEST?

Quick diagnosis will enable the implementation of treatment. Only by means of a genetic test are we able to detect the presence of the pathogen with 100% accuracy.

WHAT CAN BE DONE AFTER THE TEST RESULT?

A professional approach to the client will inspire his trust and ignite the desire to learn about their genes. Without the need for sequencing, you can access information about many DNA fragments that affect key parameters of our lives and including specific pathogens.

Nx STIs

Nx Mycoplasma hominis qPCR Detection Kit



DESCRIPTION

Mycoplasma hominis is a bacteria with the ability to penetrate the interior of human cells. Mycoplasmas are the smallest free-living organisms known. It causes a sexually transmitted disease. Mycoplasma hominis is associated with pelvic inflammatory disease and bacterial vaginosis. It is also associated with male infertility. This pathogen may latently infect the chorionic villi tissues of pregnant women, thereby impacting pregnancy outcome.

REF. NUMBER

NXSTI01MH

PATHOGENE

Mycoplasma hominis

KIT CONTENTS

1 × 2x MasterMix qPCR Probe
1 × Oligos Set
1 × Positive Control
1 × Nuclease-Free Water

QUANTITY

100 reactions

STORAGE CONDITIONS

-25°C to -15°C

CERTIFICATES



DID YOU KNOW...?

Mycoplasma hominis belongs to the normal flora of the genital organs in sexually active people. Females are more susceptible to *Mycoplasma hominis* colonization, and the intensity of colonization depends on the number of partners. The bacterium is found in the genital tract of over 50% of sexually active women. Newborns are subject to temporary colonization during delivery. *Mycoplasma hominis* is the cause of maternal fever and infections after abortion in 10% of cases.

WHY KNOWLEDGE ABOUT MYCOPLASMA HOMINIS IS IMPORTANT?

There are many consequences of the disease. That is why it is worth having regular check-ups. Especially young and sexually active people. The test material for *Mycoplasma hominis* is: urethral smear and/or cervical smear for women, and urethral smear for men.

HOW THE TEST IS PERFORMED?

Virtually 100% certainty is provided by the PCR genetic test. The use of the Real-Time PCR technique based on the detection of bacterial genetic material enables sensitive and specific identification of the pathogen. Genetic material analysis using our reagents is fast and accurate. Following the IFU included in the kit, the technician can easily interpret the results. The reaction lasts about 45 min, and the temperature-time profile is selected so that the laboratory can analyze several genes simultaneously using one device. Ready-to-use reagents are included in the kit. It is enough for the lab technician to add each of them in the right proportion and the reaction is ready. Quickly, easily and professionally.

WHY IS IT WORTH DOING A GENETIC TEST?

Quick diagnosis will enable the implementation of treatment. Only by means of a genetic test are we able to detect the presence of the pathogen with 100% accuracy.

WHAT CAN BE DONE AFTER THE TEST RESULT?

Treatment for both men and women is similar. Appropriate antibiotics prescribed by a doctor are used. The partner must also undergo treatment in order to prevent reinfection and the spread of the disease. After using the drugs, it is best to make a follow-up visit, you can also return the sample for testing. Once treated, however, the infection has a tendency to recur.

Nx STIs

Nx *Neisseria gonorrhoeae* qPCR Detection Kit



DESCRIPTION

Neisseria gonorrhoeae is a species of Gram-negative diplococci bacteria. It causes the sexually transmitted genitourinary infection gonorrhea as well as other forms of gonococcal disease including disseminated gonococemia, septic arthritis, and gonococcal ophthalmia neonatorum. *Neisseria gonorrhoeae* can cause infection of the genitals, throat, and eyes. Asymptomatic infection is common in males and females. Untreated infection may spread to the rest of the body (disseminated gonorrhea infection), especially the joints (septic arthritis). Untreated infection in women may cause pelvic inflammatory disease and possible infertility due to the resulting scarring.

REF. NUMBER

NXSTI01NG

PATHOGENE

Neisseria gonorrhoeae

KIT CONTENTS

1 × 2x MasterMix qPCR Probe
 1 × Oligos Set
 1 × Positive Control
 1 × Nuclease-Free Water

QUANTITY

100 reactions

STORAGE CONDITIONS

-25°C to -15°C

CERTIFICATES



DID YOU KNOW...?

Neisseria gonorrhoeae is a Gram-negative diplococci bacteria. It causes sexually transmitted genito-urinary infection- gonorrhoea. Other forms of gonococcal disease include disseminated gonococemia, septic arthritis, gonococcal ophthalmia neonatorum. Infection may coexist with other sexually transmitted diseases, for example co-infection with *Chlamydia trachomatis*.

WHY KNOWLEDGE ABOUT NEISSERIA GONORRHOEAE IS IMPORTANT?

Gonorrhoea is a very common disease. The infection in adults is mainly transmitted through sexual contact: vaginal, oral or anal sex. It is also possible to transmit infection to the newborn during passage through the birth canal. Clinical manifestation is different in men and women. The primary symptoms in men are: dysuria (burning with urination), increased urge to urinate, purulent discharge from the penis. In women the main symptoms include increased vaginal discharge, dysuria, lower abdominal pain, pain with intercourse, menstrual abnormalities. *Neisseria gonorrhoeae* can also cause infection of the throat and eyes. In some cases infection is asymptomatic, which is especially dangerous in pregnant women due to the risk of transmission to the newborn. That is why all pregnant women should be tested for gonorrhoea infection.

HOW THE TEST IS PERFORMED?

In the diagnosis of *Neisseria gonorrhoeae*, PCR techniques are primarily used to confirm or exclude the presence of the pathogen in the tested material. The advantage of PCR over other methods is unambiguous – the sensitivity and specificity of the test is over 99%, and the method allows the detection of a very small number of bacteria. Genetic material analysis using our reagents is fast and accurate. Following the IFU included in the kit, the lab technician can easily interpret the results. The reaction lasts about 45 min, and the temperature-time profile is selected so that the laboratory can analyze several genes simultaneously using one device. Ready-to-use reagents are included in the kit. It is enough for the lab technician to add each of them in the right proportion and the reaction is ready. Quickly, easily and professionally.

WHY IS IT WORTH DOING A GENETIC TEST?

Quick diagnosis will enable the implementation of treatment. Only by means of a genetic test are we able to detect the presence of the pathogen with 100% accuracy.

WHAT CAN BE DONE AFTER THE TEST RESULT?

Treatment for both men and women is similar. Appropriate antibiotics prescribed by a doctor are used. The partner must also undergo treatment in order to prevent reinfection and the spread of the disease. After using the drugs, it is best to make a follow-up visit, you can also return the sample for testing. Once treated, however, the infection has a tendency to recur.

Nx STIs

Nx *Treponema pallidum* qPCR Detection Kit



DESCRIPTION

Treponema pallidum belongs to the family Spirochaetaceae. The only host of this bacterium is humans. It is the cause of a sexually transmitted disease – syphilis. *Treponema pallidum* carries over from the pregnant woman to the fetus. Such a child can be born with serious defects in the nervous system and organs. Double PCR test designed for in vitro identification of the syphilis-causing pale *Treponema pallidum* spirochete. The test detects two genes of *Treponema pallidum* by nested PCR.

REF. NUMBER

NXSTI01TP

PATHOGENE

Treponema pallidum

KIT CONTENTS

1 × 2x MasterMix qPCR Probe
1 × Oligos Set
1 × Positive Control
1 × Nuclease-Free Water

QUANTITY

100 reactions

STORAGE CONDITIONS

-25°C to -15°C

CERTIFICATES



DID YOU KNOW...?

Syphilis is an infectious disease transmitted most often during sexual contact, caused by the bacterium *Treponema pallidum* (TP) belonging to the family Spirochaetaceae. The only host of this bacterium is humans. The incubation period of the disease is 9–90 days. Today, 10,000 infected people are detected every year. In the last 5 years, the number of infections has increased by 550%.

WHY KNOWLEDGE ABOUT SYPHILIS IS IMPORTANT?

Syphilis is characterized by a multi-year course with successive symptomatic and asymptomatic periods. It can be latent, self-heal or induce serious organ changes. The infectivity of *Treponema pallidum* is closely related to the period of the disease, it is greatest in the first two years. This is due to the presence of skin lesions in patients, accompanied by discharge with a significant amount of bacteria.

HOW THE TEST IS PERFORMED?

Double PCR test for the syphilis-causing pale *Treponema pallidum* spirochete. The test comprises the detection of two genes of *Treponema pallidum* by nested PCR. It is the most accurate and specific genetic test that confirms the presence of syphilis spirochete DNA in the tested biological material. It is most often performed to confirm or rule out the results of traditional screening tests. Genetic material analysis using our reagents is fast and accurate. Following the IFU included in the kit, the technician can easily interpret the results. Ready-to-use reagents are included in the kit. It is enough for the lab technician to add each of them in the right proportion and the reaction is ready. Quickly, easily and professionally.

WHY IS IT WORTH DOING A GENETIC TEST?

Quick diagnosis will enable the implementation of treatment. Only by means of a genetic test are we able to detect the presence of the pathogen with 100% accuracy.

WHAT CAN BE DONE AFTER THE TEST RESULT?

Treatment for both men and women is similar. Appropriate antibiotics prescribed by a doctor are used. The partner must also undergo treatment in order to prevent reinfection and the spread of the disease. After using the drugs, it is best to make a follow-up visit, you can also return the sample for testing. Once treated, however, the infection has a tendency to recur.

Nx STIs

Nx *Trichomonas vaginalis* qPCR Detection Kit



DESCRIPTION

Trichomonas vaginalis is an anaerobic, flagellated protozoan parasite and the causative agent of trichomoniasis. It is the most common pathogenic protozoan infection of humans in industrialized countries. Infection rates in men and women are similar, but women are usually symptomatic, while infections in men are usually asymptomatic. Transmission of *Trichomonas vaginalis* usually occurs through intercourse.

REF. NUMBER

NXSTI01TV

PATHOGENE

Trichomonas vaginalis

KIT CONTENTS

1 × 2x MasterMix qPCR Probe
 1 × Oligos Set
 1 × Positive Control
 1 × Nuclease-Free Water

QUANTITY

100 reactions

STORAGE CONDITIONS

-25°C to -15°C

CERTIFICATES



DID YOU KNOW...?

Trichomonas vaginalis is a single-celled protozoan from the group of flagellates, which is a parasite that lives in the genitourinary tract. Trichomoniasis is considered the most common treatable sexually transmitted disease. About 180 million cases are recorded each year in the world. The number of infected may be even greater, because according to the Centers for Disease Control and Prevention, the most commonly used diagnostic test has a sensitivity of 60-70%. Trichomoniasis affects both men and women, although women get the disease more often.

WHY KNOWLEDGE ABOUT TRICHOMONAS VAGINALIS IS IMPORTANT?

Symptoms of the disease occur in only 30% of infected people. The symptoms of trichomoniasis can come and go. Symptoms usually appear from the 5th to the 28th day after infection, although there are exceptions, and they occur only in the area of the genitourinary system. Symptoms can vary greatly: from mild itching to severe inflammation. The most common are: itching, irritation, burning when urinating, in women, redness may also appear, discharge – transparent or white, yellowish, greenish in color. Without treatment, the infection can go on for months, even years.

HOW THE TEST IS PERFORMED?

Molecular diagnostics of *Trichomonas vaginalis* by Real time PCR is based on the analysis of material collected from the patient in terms of genetic material (DNA) of the protozoan. Genetic material analysis using our reagents is fast and accurate. Following the IFU included in the kit, the lab technician can easily interpret the results. The reaction lasts about 45 min, and the temperature-time profile is selected so that the laboratory can analyze several genes simultaneously using one device. Ready-to-use reagents are included in the kit. It is enough for the lab technician to add each of them in the right proportion and the reaction is ready. Quickly, easily and professionally.

WHY IS IT WORTH DOING A GENETIC TEST?

Quick diagnosis will enable the implementation of treatment. Only by means of a genetic test are we able to detect the presence of the pathogen with 100% accuracy.

WHAT CAN BE DONE AFTER THE TEST RESULT?

Treatment for both men and women is similar. Appropriate antibiotics prescribed by a doctor are used. The partner must also undergo treatment in order to prevent reinfection and the spread of the disease. After using the drugs, it is best to make a follow-up visit, you can also return the sample for testing. Once treated, however, the infection has a tendency to recur.

Nx STIs

Nx *Ureaplasma parvum* qPCR Detection Kit



DESCRIPTION

Ureaplasma parvum is a species of *Ureaplasma*, a genus of bacteria belonging to the family Mycoplasmataceae. *Ureaplasma parvum* has been identified as being a commensal in the uterus as part of the microbiome in healthy women of reproductive age. In addition, this pathogen may latently infect the chorionic villi tissues of pregnant women, thereby impacting pregnancy outcome.

REF. NUMBER

NXSTI01UP

PATHOGENE

Ureaplasma parvum

KIT CONTENTS

1 × 2x MasterMix qPCR Probe
 1 × Oligos Set
 1 × Positive Control
 1 × Nuclease-Free Water

QUANTITY

100 reactions

STORAGE CONDITIONS

-25°C to -15°C

CERTIFICATES



DID YOU KNOW...?

The *Ureaplasma parvum* bacterium is part of the microbiome of most adults. It can be passed on to the baby in the womb, but remains latent until puberty. It is estimated that up to 70% of sexually active women of childbearing age are infected with ureaplasma. Epidemiological data indicate that *Ureaplasma parvum* can be transmitted to 18-55% of newborns whose mothers are carriers of this pathogen.

WHY KNOWLEDGE ABOUT UREAPLASMA IS IMPORTANT?

The most common symptoms include: frequent and painful urination, urge to empty bladder, pain in the urethra, problems with passing urine properly and emptying a full bladder. Complications of untreated ureoplasma include prostatitis in men, decreased sperm viability or infertility, inflammation of the cervical and ovarian canals, fetal infection and abnormal development of the child, premature birth or miscarriage.

HOW THE TEST IS PERFORMED?

In the diagnosis of Ureaplasma, PCR techniques are primarily used to confirm or exclude the presence of the pathogen in the tested material. The advantage of PCR over other methods results from the sensitivity and specificity of the test - the reliability is over 99%. Genetic material analysis using our reagents is fast and accurate. Thanks to the IFU instructions included in the kit, it can easily interpret the results, without the possibility of making a mistake. Ready-to-use reagents are included in the kit. It is enough for the lab technician to add each of them in the right proportion and the reaction is ready. Quickly, easily and professionally.

WHY IS IT WORTH DOING A GENETIC TEST?

Quick diagnosis will enable the implementation of treatment. Only by means of a genetic test are we able to detect the presence of the pathogen in 100%.

WHAT CAN BE DONE AFTER THE TEST RESULT?

Treatment for both men and women is similar. Appropriate antibiotics prescribed by a doctor are used. The partner must also undergo treatment in order to prevent reinfection and the spread of the disease. After using the drugs, it is best to make a follow-up visit, you can also return the sample for testing. Once treated, however, the infection has a tendency to recur.

Nx STIs

Nx *Ureaplasma urealyticum* qPCR Detection Kit



DESCRIPTION

Ureaplasma urealyticum is a bacterium commonly found in the urogenital tracts of human beings, but overgrowth can lead to infections that cause the patient discomfort. Unlike most bacteria, *Ureaplasma urealyticum* lacks a cell wall, making it unique in physiology and medical treatment. It causes infection of the urinary tract and vagina. It can be passed from mother to infant during birth, or be sexually transmitted. It can be found in cultures in cases of pelvic inflammatory disease. Infection with *Ureaplasma urealyticum* can contribute to neonatal infection and negative birth outcomes.

REF. NUMBER

NXSTI01UU

PATHOGENE

Ureaplasma urealyticum

KIT CONTENTS

1 × 2x MasterMix qPCR Probe
 1 × Oligos Set
 1 × Positive Control
 1 × Nuclease-Free Water

QUANTITY

100 reactions

STORAGE CONDITIONS

-25°C to -15°C

CERTIFICATES



DID YOU KNOW...?

Ureaplasma is a sexually transmitted bacterium. Responsible for causing genital and urinary infections, it is very easy to become infected – it is enough to have unprotected sexual intercourse with an infected person. It is estimated that up to 70% of sexually active women of childbearing age are infected with ureaplasma. Ureaplasma can also be caught in childbirth – when a baby passes through the birth canal of an infected mother. Epidemiological data indicate that Ureaplasma urealyticum can be transmitted to 18-55% of newborns whose mothers are carriers of this pathogen.

WHY KNOWLEDGE ABOUT UREAPLASMA IS IMPORTANT?

The most common symptoms include: painful and frequent urination, urge to empty bladder, burning and pain in the urethra, problems with passing urine properly and emptying a full bladder. Complications of untreated ureoplasma include prostatitis in men, decreased sperm viability or infertility, inflammation of the cervical and ovarian canals, fetal infection and abnormal development of the child, premature birth or miscarriage.

HOW THE TEST IS PERFORMED?

In the diagnosis of Ureaplasma, PCR techniques are primarily used to confirm or exclude the presence of the pathogen in the tested material. The advantage of PCR over other methods is unambiguous – the sensitivity and specificity of the test is over 99%, and the method allows the detection of a very small number of bacteria. Genetic material analysis using our reagents is fast and accurate. Following the IFU included in the kit, the lab technician can easily interpret the results. Ready-to-use reagents are included in the kit. It is enough for the lab technician to add each of them in the right proportion and the reaction is ready. Quickly, easily and professionally.

WHY IS IT WORTH DOING A GENETIC TEST?

Quick diagnosis will enable the implementation of treatment. Only by means of a genetic test are we able to detect the presence of the pathogen with 100% accuracy.

WHAT CAN BE DONE AFTER THE TEST RESULT?

Treatment for both men and women is similar. Appropriate antibiotics prescribed by a doctor are used. The partner must also undergo treatment in order to prevent reinfection and the spread of the disease. After using the drugs, it is best to make a follow-up visit, you can also return the sample for testing. Once treated, however, the infection has a tendency to recur.

Nx STIs

**Nx Monkeypox virus
qPCR Detection Kit**



DESCRIPTION

Monkeypox is a rare viral zoonotic disease. It is caused by a pathogen of the genus orthopoxvirus – the monkeypox virus. Various animal species, not just monkeys, can be natural carriers of the monkeypox virus. Infections have also been observed in rats, squirrels, and dogs. However, in European countries, direct contact with a sick person is responsible for the spread of the virus – the pathogen is spread by droplets and secretions. The incubation time is about 12 days.

REF. NUMBER

NXSTI01MP

PATHOGENE

Monkeypox virus

KIT CONTENTS

- 1 × 2x MasterMix qPCR Probe
- 1 × Oligos Set
- 1 × Positive Control
- 1 × Nuclease-Free Water

QUANTITY

100 reactions

STORAGE CONDITIONS

-25°C to -15°C

CERTIFICATES



DID YOU KNOW...?

Monkeypox is caused by the monkeypox virus (MPXV) of the Orthopoxvirus genus of the Poxviridae family. It is a zoonotic disease, which means that we get it from animals, but it can also be transmitted between people. Contrary to the name, the main carriers of the virus are not monkeys, but rodents, mainly squirrels and rats. The name of the disease refers to primates because it was in monkeys in 1958 that the symptoms of the disease were first observed. The first human cases were detected 12 years later in 1970. A total of 84,560 laboratory-confirmed cases and 1,351 probable cases, including 80 deaths, have been reported to WHO.

WHAT ARE THE SYMPTOMS OF MONKEYPOX?

Initial symptoms of the disease: high fever, above 38.50°C, generalized or localized lymphadenopathy (as opposed to chickenpox), headache, back pain, and significant weakness. Other symptoms, delayed in time: After 1-3 days, the patient develops a rash (in order: spots, papules, vesicles, pustules, scabs). The rash usually starts on the face and then spreads to other parts of the body. When the rash appears, the person is contagious. The rash persists for 2-4 weeks. The scars after the scabs fall off due to the rash are very deep, but they disappear in 1-4 years.

HOW THE TEST IS PERFORMED?

Virtually 100% certainty is provided by the PCR genetic test. The use of the Real-Time PCR technique based on the detection of virus genetic material enables sensitive and specific identification of the pathogen. Genetic material analysis using our reagents is fast and accurate. Thanks to the IFU instructions included in the kit, it can easily interpret the results of making a mistake. The reaction lasts about 60 min, and the temperature-time profile is selected so that the laboratory can analyze several genes simultaneously using one device of equipment. Ready-to-use reagents are included in the kit. It is enough for the lab technician to add each of them in the right proportion and the reaction is ready. Quickly, easily and professionally.

WHY IS IT WORTH DOING A GENETIC TEST?

Quick diagnosis will enable the implementation of treatment. Only by means of a genetic test are we able to detect the presence of the pathogen in 100%. Rapid diagnosis counteracts the epidemic.

WHAT CAN BE DONE AFTER THE TEST RESULT?

Treatment is symptomatic. Sick people must be isolated, and everyone they have been in contact with must be quarantined. Monkeypox could be the cause of another epidemic.



nxbiote.ch