



NZYtech
genes & enzymes

HUMAN

The COVID-19 pandemic has profoundly impacted global health and highlighted the importance of accurate and timely diagnostic tools. Polymerase chain reaction (PCR) has emerged as a key technology in the fight against COVID-19, enabling rapid and precise detection of the SARS-CoV-2 virus that causes COVID-19. PCR has played a critical role in widespread testing, surveillance, and the development of vaccines and therapies. At NZYTech, we are committed to providing innovative solutions that support the fight against infectious diseases. These qPCR kits are optimized to detect a wide range of viral, bacterial, and fungal pathogens that can cause infectious diseases in humans, including respiratory infections, sexually transmitted infections, and gastrointestinal infections. Our qPCR kits deliver accurate and reliable results, providing rapid and precise diagnosis to support patient care. NZYTech's qPCR kits offer high sensitivity and specificity, enabling early detection and monitoring of infectious diseases. Our human pathogen qPCR kits are suitable for use in a variety of settings, including clinical diagnostic laboratories, research institutions, and hospitals. They are compatible with a wide range of sample types, including blood, sputum, urine, and swabs, and can be used with a variety of qPCR instrumentation. Our team of experienced scientists is available to provide technical support and guidance to help researchers and healthcare professionals achieve their scientific and clinical objectives.



RESPIRATORY

Rapid and accurate diagnosis of respiratory infections is critical to enabling early intervention and treatment. Early detection can help prevent the spread of infections and reduce the risk of complications. In this section, you will find a comprehensive range of molecular diagnostic assays for the detection of various respiratory pathogens, including SARS-CoV-2, influenza, respiratory syncytial virus (RSV), different mycobacterium, and many others. Our assays are designed to work with a variety of sample types, including nasopharyngeal swabs, saliva, and sputum, and can be performed on a variety of PCR platforms. In addition, the tests have been extensively validated and are highly sensitive and specific, enabling accurate and reliable detection of different respiratory pathogens.

	Catalogue number	Product name	Number of reactions
CE-IVD	MD04931	MRSA Multiplex Real-time PCR Kit, IVD	96 reactions
CE-IVD	MD03201	SARS-CoV-2 One-Step RT-PCR Kit, IVD	96 reactions
CE-IVD	MD04831	SARS-CoV-2 One-Step RT-PCR Kit, RdRp and N Genes, IVD	96 reactions
CE-IVD	MD04832	SARS-CoV-2 One-Step RT-PCR Kit, RdRp and N Genes, IVD	4x 96 reactions
CE-IVD	MD04871	SARS-CoV-2 One-Step RT-PCR Kit II, RdRp and N Genes, IVD	96 reactions
CE-IVD	MD04872	SARS-CoV-2 One-Step RT-PCR Kit II, RdRp and N Genes, IVD	4x 96 reactions
CE-IVD	MD04911	SARS-CoV-2 One-Step RT-qPCR Kit III, 5 Targets, IVD	96 reactions
CE-IVD	MD04912	SARS-CoV-2 One-Step RT-qPCR Kit III, 5 Targets, IVD	4x 96 reactions
CE-IVD	MD04851	COVID-19 & Flu A/B Multiplex One-Step RT-qPCR Kit, IVD	96 reactions
CE-IVD	MD04901	COVID-19, Flu A/B, RSV Multiplex One-Step RT-qPCR Kit, IVD	96 reactions
CE-IVD	MD04902	COVID-19, Flu A/B, RSV Multiplex One-Step RT-qPCR Kit, IVD	4x 96 reactions
	MD05131	Acinetobacter baumannii qPCR Kit	100 reactions
	MD05571	Enterovirus RT-qPCR Kit	100 reactions
	MD05621	Human influenza A virus H1 RT-qPCR Kit	100 reactions
	MD05611	Human rhinovirus RT-qPCR Kit	100 reactions
	MD06641	Influenza A virus H5N1 RT-qPCR Kit	100 reactions
	MD05281	Legionella pneumophila qPCR Kit	100 reactions
	MD06651	Leptospira (16S rDNA + LipL32) qPCR Kit	100 reactions
	MD05881	Leptospira (LipL32) qPCR Kit	100 reactions
	MD06271	Leptospira spp. (16S rDNA) qPCR Kit	100 reactions
	MD06311	MERS-CoV RT-qPCR Kit	100 reactions
	MD05071	Mycobacterium spp. qPCR Kit	100 reactions
	MD05061	Mycobacterium tuberculosis complex qPCR Kit	100 reactions
	MD05341	Mycobacterium tuberculosis qPCR Kit	100 reactions
	MD05351	Mycoplasma pneumoniae qPCR Kit	100 reactions
	MD05511	Mycoplasma spp. qPCR Kit	100 reactions
	MD05901	Pseudomonas aeruginosa qPCR Kit	100 reactions
	MD05641	Respiratory Syncytial virus RT-qPCR Kit	100 reactions
	MD03191	SARS-CoV-2 One-Step RT-PCR Kit, RUO	100 reactions
	MD05441	Staphylococcus aureus qPCR Kit	100 reactions
	MD05541	Streptococcus pneumoniae qPCR Kit	100 reactions

SEXUAL HEALTH

Sexually transmitted diseases (STDs) are a major public health concern, affecting millions of people worldwide. These infections can cause serious health problems if left untreated and can also be transmitted to sexual partners. Early diagnosis and treatment are critical to preventing the spread of STDs and minimizing their health consequences. In this section, you will find a comprehensive range of molecular diagnostic assays for the detection of various sexually transmitted pathogens, including *Candida albicans*, *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, *Mycoplasma genitalium*, and many others. Our assays are designed to work with a variety of sample types, including urine, vaginal swabs, and cervical swabs, and can be performed on a variety of PCR platforms. NZYTech kits have been extensively validated and are highly sensitive and specific, enabling accurate and reliable detection of sexually transmitted pathogens.

	Catalogue number	Product name	Number of reactions
CE-IVD	MD04941	Group B Streptococcus Real-time PCR Kit, IVD	96 reactions
CE-IVD	MD05851	Candida albicans qPCR Kit	96 reactions
	MD04891	Candida albicans Real-time PCR Kit, IVD	100 reactions
	MD05861	Chlamydia trachomatis qPCR Kit	100 reactions
	MD05271	Herpes Simplex virus 1 & 2 qPCR Kit	100 reactions
	MD05431	Herpes Simplex virus 1 qPCR Kit	100 reactions
	MD05491	Herpes Simplex virus 2 qPCR Kit	100 reactions
	MD05391	Mycoplasma genitalium qPCR Kit	100 reactions
	MD05511	Mycoplasma spp. qPCR Kit	100 reactions
	MD05891	Neisseria gonorrhoeae qPCR Kit	100 reactions
	MD05911	Trichomonas vaginalis qPCR Kit	100 reactions

GASTROINTESTINAL INFECTIONS

Gastrointestinal infections are a major global health concern, affecting millions of people every year. These infections can be caused by a wide range of pathogens, including bacteria such as Salmonella and *Escherichia coli*, viruses such as Rotavirus, and parasites such as Giardia and Cryptosporidium. Early and accurate diagnosis of these pathogens is crucial to the effective treatment and management of these infections. In this section, you will find a comprehensive range of molecular diagnostic assays for the detection of various gastrointestinal pathogens. Our assays are designed to work with a variety of sample types, including stool and rectal swabs, and can be performed on a variety of PCR platforms. These NZYTech tests have been extensively validated and are highly sensitive and specific, enabling accurate and reliable detection of gastrointestinal pathogens.

Catalogue number	Product name	Number of reactions
MD06111	Clostridium perfringens qPCR Kit	100 reactions
MD05381	Cryptosporidium parvum qPCR Kit	100 reactions
MD05211	Entamoeba spp. qPCR Kit	100 reactions
MD05001	Enterococcus faecalis qPCR Kit	100 reactions
MD06171	Escherichia coli Typing eae & ehxA (EHEC, EPEC) qPCR Kit	100 reactions
MD06181	Escherichia coli Typing eae (EHEC or EPEC) qPCR Kit	100 reactions
MD06191	Escherichia coli Typing ehxA (EHEC) qPCR Kit	100 reactions
MD06201	Escherichia coli Typing stx1 & stx2 (STEC) qPCR Kit	100 reactions
MD05241	Giardia lamblia (A-B) qPCR Kit	100 reactions
MD05251	Giardia lamblia (A-F) qPCR Kit	100 reactions
MD06511	Rotavirus RT-qPCR Kit	100 reactions
MD06521	Salmonella enterica qPCR Kit	100 reactions

ANTIBIOTIC RESISTANCE & SEPSIS

The continuous emergence and spread of bloodborne diseases, antibiotic-resistant bacteria, and sepsis pose significant challenges to healthcare systems worldwide. Timely and accurate diagnostic tools are critical in the management and treatment of these diseases, and NZYTech's 2023/2024 catalogue of molecular diagnostics offers some cutting-edge solutions designed to meet these challenges. Our innovative tools enable healthcare professionals to make informed decisions, initiate targeted treatment plans, and help prevent the spread of these life-threatening infections. Bloodborne diseases, including viral hepatitis, are a major public health concern. In addition, the growing threat of antibiotic-resistant bacteria, such as methicillin-resistant *Staphylococcus aureus* (MRSA), demands a heightened level of vigilance and accurate diagnostics. NZYTech's 2023/2024 catalogue includes advanced molecular assays for the rapid identification of resistant strains, enabling healthcare professionals to initiate targeted treatment plans and control

Catalogue number	Product name	Number of reactions
MD05461	Class A Beta-lactamase (blaGES) resistance qPCR Kit	100 reactions
MD05471	Class B Beta-lactamase (blaIMP) resistance qPCR Kit	100 reactions
MD05481	Class B Beta-lactamase (blaVIM) resistance qPCR Kit	100 reactions
CE-IVD MD04931	MRSA Multiplex Real-time PCR Kit, IVD	96 reactions

BLOODBORNE

Catalogue number	Product name	Number of reactions
MD05031	Hepatitis B virus qPCR Kit	100 reactions

IMMUNOSUPPRESSED & MENINGITIS

Immunodeficiency disorders and meningitis diseases are serious health concerns that can have significant impacts on patient health and well-being. These diseases can be caused by a variety of pathogens, including bacteria, viruses, and fungi. The ability to accurately diagnose and monitor these conditions is critical for immunosuppressed patients and those suffering from meningitis. Early detection can help prevent severe complications and improve the patient's quality of life. The following section presents a comprehensive overview of our cutting-edge molecular diagnostic products that aid in the identification and management of these challenging diseases, including human herpes simplex virus, *Leptospira*, and Varicella-Zoster virus. Our assays are designed to work with a variety of sample types, including blood, cerebrospinal fluid, and saliva, and can be performed on a variety of PCR platforms.

Catalogue number	Product name	Number of reactions
MD05451	Cytomegalovirus (Human Herpesvirus 5) qPCR Kit	100 reactions
MD05131	Acinetobacter baumannii qPCR Kit	100 reactions
MD05011	Epstein Barr virus (HHV4) qPCR Kit	100 reactions
MD05271	Herpes Simplex virus 1 & 2 qPCR Kit	100 reactions
MD05431	Herpes Simplex virus 1 qPCR Kit	100 reactions
MD05491	Herpes Simplex virus 2 qPCR Kit	100 reactions
MD06651	Leptospira (16S rDNA + LipL32) qPCR Kit	100 reactions
MD05881	Leptospira (LipL32) qPCR Kit	100 reactions
MD06271	Leptospira spp. (16S rDNA) qPCR Kit	100 reactions
MD05521	Staphylococcus epidermidis qPCR Kit	100 reactions
MD05261	Varicella-Zoster virus qPCR Kit	100 reactions

VECTOR-BORNE & TROPICAL

In a globalized world, vector-borne and tropical diseases are major global health concerns, affecting millions of people every year. These diseases can be caused by a wide range of pathogens, including bacteria, viruses, and parasites. Climate changes have also led to the appearance of these diseases in regions of the globe where they were previously unknown. Early and accurate diagnosis of these pathogens is crucial to the effective treatment and management of these diseases. In this section, you will find a comprehensive range of molecular diagnostic assays for the detection of various vector-borne and tropical pathogens, including monkeypox virus, dengue fever, Zika virus, and many others. Our assays are designed to work with a variety of sample types, including blood, urine, and saliva, and can be performed on a variety of PCR platforms. NZYTech qPCR and RT-qPCR test kits have been extensively validated and are highly sensitive and specific, enabling accurate and reliable detection of vector-borne and tropical pathogens.

Catalogue number	Product name	Number of reactions
MD05711	Chikungunya virus RT-qPCR Kit	100 reactions
MD05171	Coxiella burnetii qPCR Kit	100 reactions
MD05561	Crimean Congo Haemorrhagic Fever virus RT-qPCR Kit	100 reactions
MD05701	Dengue virus RT-qPCR Kit	100 reactions
MD05221	Francisella tularensis qPCR Kit	100 reactions
MD05721	Japanese encephalitis virus RT-qPCR Kit	100 reactions
MD05871	Leishmania spp. qPCR Kit	100 reactions
MD05291	Lyme Disease qPCR Kit	100 reactions
MD04951	Monkeypox virus Real-time PCR Kit, RUO	96 reactions
MD05671	Rift Valley Fever virus RT-qPCR Kit	100 reactions
MD05731	Zika virus RT-qPCR Kit	100 reactions

OTHERS

The early diagnosis of infections caused by a wide range of human pathogens is crucial for timely and appropriate treatment, leading to improved patient outcomes and overall public health. NZYTech's 2023/2024 catalogue of molecular diagnostics provides cutting-edge tools and assays for the accurate detection and identification of numerous pathogens, including *Bacillus anthracis*, hepatitis viruses, *Pasteurella*, *Toxoplasma gondii*, *Brucella*, *Bartonella*, and many others. In this section, we present an overview of our molecular diagnostic products specifically designed for the detection and identification of these diverse pathogens. Our advanced tools enable healthcare professionals to swiftly and accurately diagnose infections, initiate targeted treatment plans, and monitor disease progression, ultimately contributing to improved patient care and health outcomes.

Catalogue number	Product name	Number of reactions
MD04981	Acanthamoeba spp. qPCR Kit	100 reactions
MD05951	Aerococcus viridans qPCR Kit	100 reactions
MD06631	Bacillus anthracis qPCR Kit	100 reactions
MD05151	Bartonella henselae qPCR Kit	100 reactions
MD05971	Bartonella spp. qPCR Kit	100 reactions
MD05401	Brucella spp. qPCR Kit	100 reactions
MD05581	Hepatitis A virus RT-qPCR Kit	100 reactions
MD05591	Hepatitis E virus RT-qPCR Kit	100 reactions
MD06381	Nocardia spp. qPCR Kit	100 reactions
MD06401	Pasteurella multocida qPCR Kit	100 reactions
MD06411	Pasteurella multocida toxA qPCR Kit	100 reactions
MD05331	Simian virus 40 qPCR Kit	100 reactions
MD05841	Streptococcus agalactiae (Group B) qPCR Kit	100 reactions
MD05111	Toxoplasma gondii qPCR Kit	100 reactions

ENDOGENOUS CONTROLS

The reliability and accuracy of molecular diagnostics depend heavily on the proper collection and handling of biological samples. To ensure the utmost confidence in test results, NZYTech's 2023/2024 catalogue of molecular diagnostics offers a dedicated kit for confirming the presence of human DNA in collected samples. This innovative product is designed to provide an additional layer of quality assurance in diagnostic workflows, guaranteeing that samples are correctly collected and suitable for downstream analysis. The human endogenous control kit utilizes a highly sensitive and specific molecular assay designed to target a conserved region of human genomic DNA. This straightforward and rapid test is compatible with a wide range of sample types, including blood, saliva, and tissue specimens. Easy to integrate into existing workflows, the kit provides a quick and reliable method to confirm the presence of human DNA in collected samples.

Catalogue number	Product name	Number of reactions
MD05781	Endogenous Control A Real-Time PCR Kit	48 reactions

