GENOMED

PRODUCT LIST
2011

- GML® Sequencing Kits
- GML® Fragment Analysis Kits
- GML® Real Time PCR Kits

GML®

SEQUENCING KITS

GML® HBB Seqfinder Sequencing System Kit

Beta thalassemia syndromes are a group of hereditary disorders characterized by a genetic deficiency in the synthesis of beta-globin chains. In the homozygous state, beta thalassemia (i.e. thalassemia major) causes severe transfusion-dependent anaemia. In the heterozygous state, the beta thalassemia trait (i.e. thalassemia minor) causes mild-to-moderate microcytic anaemia.

Thalassemias are particularly associated with people of Mediterranean, Arab or Asian origin. The Maldives has the highest incidence of Thalassemia in the world with a carrier rate of 18% of the population. The estimated prevalence is 16% in people from Cyprus, 1% in Thailand, and 3-8% in populations from Bangladesh, China, India, Malaysia and Pakistan.

There are also prevalences in descendants of people from Latin America and Mediterranean countries (e.g. Greece, Italy, Portugal, Spain and others). A very low prevalence has been reported from people in Northern Europe (0.1%) and Africa (0.9%), with those in North Africa having the highest prevalence. It is also particularly common in populations of indigenous ethnic minorities of Upper Egypt such as the Beja, Hadendoa, Sa'idi and also peoples of the Nile Delta, Red Sea Hill Region and especially amongst the Siwans.

Medical studies in the UAE indicate that the frequency of beta-globin gene defects including beta-thalassemia, sickle cell gene (betaS) and abnormal haemoglobins are significantly increased and pose a major public health problem. The number of homozygous patients strongly suggests a high degree of consanguinity among UAE nationals. With 50 different beta-thalassemia alleles, the UAE has arguably the most heterogeneous population in the world. The diversity of these mutations reflects the historical admixture of genes and their migration from different areas in the region.

Therefore, two asymptomatic carrier parents have a 25% chance of a child with the disorder, a 50% chance of a child who is an asymptomatic carrier and a 25% chance of a child who does not carry the disorder. HBB patients who have children with a carrier or another HBB patient have a 50% and 100% chance, respectively, of having a child with HBB. The cost of treatment for a thalassemia patient is approximately USD 12,000-15,000 per year. The cost of treatment for a person with homozygous beta thalassemia major mutation will be between 1-1.5 million USD during the course of their lifetime.

DNA sequencing can greatly reduce this cost by detecting possible mutations in foetal DNA during the gestation period or by screening parents prior to conception. Deletions, insertions and SNPs can easily be detected using the DNA sequencing method. Whole gene DNA sequencing is recognised as the best molecular method for diagnosis prior to conception, detecting 99 percent of all beta thalassemia cases.

Target Customers

- Hospital medical genetics laboratories
- For research use only, university molecular biology & genetics departments
- Private medical centres
- Molecular genetics diagnostic laboratories.
- Biochemistry departments in medical faculties.
- Prenatal diagnostic centres.

GML® BRCA1 and BRCA2 SeqFinder Sequencing System Kit

BRCA1 is expressed in the cells of breast and other tissue, where it helps repair damaged DNA, or destroy cells if DNA cannot be repaired. If BRCA1 itself is damaged, damaged DNA is not repaired properly and this increases the risk of cancer. BRCA2 belongs to the tumour suppressor gene family and the protein encoded by this gene is involved in the repair of chromosomal damage with an important role in the error-free repair of DNA double strand breaks.

Although the structures of the BRCA1 and BRCA2 genes are very different, some functions are interrelated. The proteins made by both genes are essential for repairing damaged DNA. Both BRCA1 and BRCA2 are large genes, comprising 23 and 27 exons, respectively. Mutations found in both BRCA genes are not located in hotspots, but are distributed throughout the gene coding region. Functional mutations have been correlated with an increased cancer risk.

The product is available as pre-spotted, semi-skirted PCR plates, with GML® BRCA1 and BRCA2 Seqfinder Sequencing System Kit quality primer pairs, to generate and identify 80 PCR products covering both genes. Primers have been optimised for use with Applied Biosystems BigDye® Direct Cycle Sequencing kits, but are also fully compatible with standard PCR and fluorescent sequencing protocols such as the BigDye® Terminator v3.1 Cycle Sequencing Kit. The PCR products have been designed and optimised for 100% coverage of the coding sequence of the BRCA1 and BRCA2 genes.

The general worldwide consensus for breast and ovarian cancer screening criteria is as follows:

Risk assessment

1. Two or more relatives in a family have been diagnosed with cancer.
2. Cancer has been diagnosed in a family member under the age of 50 years.
3. The same type of cancer has occurred in several members of a family.
4. More than one type of cancer has occurred in one member of a family.
5. A rare cancer has occurred in one or more members of a family.

Who should be screened for BRCA1-BRCA2 mutation analysis?

1. A woman with breast or ovarian cancer diagnosed before age 50 years, who has a first- or second-degree relative with breast or ovarian cancer diagnosed before age 50 years.
2. A woman diagnosed with breast cancer at any age, who has two or more family members diagnosed with breast cancer and/or one or more family members diagnosed with ovarian cancer.
3. An unaffected individual who has a first- or second-degree relative with a known BRCA1 or BRCA2 mutation.
4. An Ashkenazi Jewish woman with breast cancer diagnosed before age 40 years or ovarian cancer diagnosed at any age.
5. An unaffected woman with two or more first- or second-degree relatives diagnosed with breast or ovarian cancer before age 50 years.
6. Breast and ovarian cancer in the same woman.
7. A man diagnosed with breast cancer, or an individual who has a male relative with breast cancer.

Target Customers

- Hospital medical genetics laboratories
- Private medical centres.
- Private centres researching human cancers.
- Oncology departments of hospitals or medical faculties.
- Gynaecology departments of hospitals or medical faculties.

GML® MEFV Seqfinder Sequencing System Kit

Familial Mediterranean fever (FMF) is an inherited, recurrent inflammatory disease of unknown cause. The disease is characterised by acute self-limited attacks of fever and peritonitis, sometimes accompanied by pleuritis, arthritis, and erythematous skin lesions. Among affected individuals in the Middle East and Europe, FMF is frequently complicated by amyloidosis and progressive renal failure. The disorder inherits in an autosomal recessive fashion.

Therefore, two asymptomatic carrier parents have a 25% chance of a child with the disorder, a 50% chance of a child who is an asymptomatic carrier and a 25% chance of a child who does not carry the disorder. FMF patients who have children with a carrier or another FMF patient have a 50% and 100% chance, respectively, of having a child with FMF. Deletions, insertions and SNPs can be easily detected using the DNA sequencing method. Sequencing Exon 2 and 10 of the MEFV gene with capillary electrophoresis identifies 92% of all MEFV gene mutations which cause FMF disease. Additionally, sequencing Exon 3 and Exon 5 increases this rate of identification to 97%. Traditional methods such as strip tests can only detect 12 of the most common MEFV mutations, whereas there are over 140 mutations in the FMF-related gene.

Target Customers

- Hospital medical genetics laboratories
- For research use only, university molecular biology & genetics departments
- Private medical centres
- Molecular genetics diagnostic laboratories.
- Biochemistry and Rheumatology departments in medical faculties.

GML® CFTR Seqfinder Sequencing System Kit

Cystic fibrosis (CF) is caused by a mutation in a gene called the cystic fibrosis transmembrane conductance regulator (CFTR), which serves an important function in creating sweat, mucus, and digestive juices. Only one copy of this gene is needed to prevent cystic fibrosis, and most people have two copies. Cystic fibrosis is a hereditary disease and a child is only at risk of the disease if both parents are carriers. A child must inherit two copies of the defective gene in order to have CF. A child with two parents who are carriers of the defective gene has a 25% chance of having cystic fibrosis and being a carrier of two defective copies of the gene, a 25% chance of not being affected nor a carrier of a defective copy of the gene, and a 50% chance of not being affected by CF but carrying one defective copy of the gene.

CFTR has been the most common among genetic diseases since the 1960s. In Caucasians, the frequency of occurrence is 1:2500 while the incidence of heterozygosis is 1:25. Today, over 1500 mutations relating to the CFTR gene have been detected. Deletions, insertions and SNPs can easily be detected using the DNA sequencing method. Sequencing Exon 7-10-11 of CFTR gene with capillary electrophoresis identifies the most common and important mutations.

Target Customers

- Hospital medical genetics laboratories
- For research use only, university molecular biology & genetics departments
- Private medical centres
- Molecular genetics diagnostic laboratories
- Biochemistry departments in Medical Faculties.

GML®

FRAGMENT ANALYSIS KITS

GML® Y-Chromosome Microdeletion Detection System v.2.1

Microdeletions of the Y chromosome are the second most frequent genetic cause of spermatogenetic failure in infertile men, after Klinefelter syndrome. The molecular diagnosis of Y-chromosomal microdeletions is routinely performed by targeting azoospermia or severe oligozoospermia.

The portion of the male-specific region of the Y chromosome (MSY) which is affected by deletions, comprising 95% of the Y chromosome and flanked by pseudoautosomal regions, has been classically subdivided into four regions called AZFa, AZFb, AZFc and proximal AZFc (AZFd), respectively .

Microdeletions are relatively frequent among infertile men, although the incidence can vary considerably depending on the selection criteria of the patients. Azoospermic men have a higher incidence of microdeletions than oligozoospermic men and consequently deletion frequency found in different laboratories may vary from 2 to 55% (or even higher) reflecting the composition of the study population. Fragment analysis on genetic analysers, using 25 markers including an internal positive controls marker labelled with fluorochromes, can detect all deletions in Y-chromosome AZFa-b-c-d sites.

Target Customers

- Hospital medical genetics laboratories
- Private in-vitro fertilisation centres
- For research use only, university molecular biology & genetics departments
- Private PGD (Pre-implantation genetic diagnosis) centres.
- Private medical centres
- Centres providing ICSI and TESE treatments
- Urology departments of hospitals or medical faculties

GML®

REAL TIME PCR KITS

Hepatitis D Virus Detection Kit

Hepatitis D virus (HDV), also known as *Hepatitis delta virus*, is a disease caused by a small circular enveloped RNA virus. The genome of HDV is unrelated to the genomes of hepadnaviruses, of which hepatitis B virus (HBV) is a member. HDV is therefore not a defective-interfering particle of HBV, and should be considered as a satellite virus, a natural sub-viral satellite of HBV.

Worldwide, more than 15 million people are co-infected. HDV is rare in most developed countries, and is mostly associated with intravenous drug use. However, HDV is much more common in the immediate Mediterranean region, sub-Saharan Africa, the Middle East, and the northern part of South America. In all, about 20 million people may be infected with HDV.

Identification of HDV RNA by PCR allows detection of the causative agent in the period of introduction of infection before seroconversion, which is very important for early diagnosis.

Target Customers

- Departments of Infectious Diseases
- Microbiology departments
- Gastroenterology departments

Chlamydia Trachomatis Detection Kit

Chlamydia trachomatis, an obligate intracellular human pathogen, is one of three bacterial species in the genus *Chlamydia*. Chlamydia trachomatis can cause numerous disease states in both men and women. Both sexes can display urethritis, proctitis (rectal disease and bleeding), trachoma and infertility. The bacterium can cause prostatitis and epididymitis in men. In women, cervicitis, pelvic inflammatory disease (PID), ectopic pregnancy, and acute or chronic pelvic pain are frequent complications. C. trachomatis is also an important neonatal pathogen, where it can lead to infections of the eye (trachoma) and pulmonary complications.

Chlamydia trachomatis is the single most important infectious agent associated with blindness; approximately 600 million worldwide suffer C. trachomatis eye infections and 20 million are blinded as a result of the infection.

The most important disease caused by C. trachomatis is trachoma, which affects the inner upper eyelid and cornea and is one of the most common infectious causes of blindness. The disease starts as an inflammatory infection of the eyelid and evolves to trachomatous trichiasis (at least one eyelash rubbing on the eyeball, or loss of interned eyelashes) and blindness due to corneal opacity.

In some parts of the developing world, over 90% of the population is infected with trachoma. Despite long-standing control efforts, it is estimated that more than 500 million people are still at high risk of infection, over 140 million are infected and about 6 million are blind in Africa, the Middle East, Central and South-East Asia, and countries in Latin America. The disease is particularly prevalent and severe in rural populations living in poor and arid areas of the world, where people have limited access to water and personal hygiene is difficult.

Visual loss from trachoma often starts in middle life and is 2–3 times more common in women. It is therefore a major cause of disability in affected communities, attacking the economically important middle-aged female population. Trachoma is a communicable disease in families, with repeated reinfection occurring among family members.

Target Customers

- Hospital medical genetics laboratories
- Microbiology departments
- Departments of infectious diseases
- Gynaecology departments

Neisseria Gonorrhoeae Detection Kit

N gonorrhoeae is a gram-negative, intracellular, aerobic diplococcus. It mainly affects the host's columnar or cuboidal epithelium. Gonorrhoea (also called the clap and the drip), which is caused by *Neisseria gonorrhoeae,* is an important public health problem and is the most common reportable infectious disease.

Gonorrhoea is most frequently spread during sexual contact. However, it can also be transmitted from the mother's genital tract to the newborn during birth, causing ophthalmia neonatorum and systemic neonatal infection. The incubation period is usually 2-8 days.

In women, the cervix is the most common site of gonorrhoea, resulting in endocervicitis and urethritis, which can be complicated by pelvic inflammatory disease (PID). In men, gonorrhoea causes anterior urethritis.

Target Customers

- Hospital medical genetics laboratories
- Microbiology departments
- Departments of infectious diseases
- Gynaecology departments

Ureaplasma Species and Mycoplasma Detection Kit

Ureaplasma species and Mycoplasma are causes of nonchlamydial nongonococcal urethritis. Mycoplasma species do not cause vaginitis, but they may proliferate in patients with bacterial vaginosis and may contribute to the condition. *M. hominis* has been isolated from the endometria and fallopian tubes of approximately 10% of women with salpingitis; *M. genitalium* may also be involved in pelvic inflammatory disease and cervicitis.

Ureaplasma species can cause placental inflammation and may invade the amniotic sac early, causing persistent infection and adverse pregnancy outcomes, including premature birth. *Ureaplasma biovars*, *Ureaplasma urealyticum*, which has been noted as one of the infectious causes of sterile pyuria, and *Ureaplasma parvum*, have now been designated as separate species. Separation of these species is not possible except via molecular techniques such as polymerase chain reaction (PCR).

Target Customers

- Hospital medical genetics laboratories
- Microbiology departments
- Departments of infectious diseases
- Gynaecology departments

Trichomonas Vaginalis Detection Kit

Trichomonas vaginalis is a single cell flagellum parasite that lives in the female vagina and the male urethra. Infection rates between men and women are the same, with women showing symptoms while infections in men are usually asymptomatic. Transmission takes place directly because the trophozoite does not have a cyst. The WHO has estimated that 180 million cases of infection are acquired annually worldwide. The estimates for North America alone are between 5 and 8 million new infections each year, with an estimated rate of asymptomatic cases as high as 50%.

Complications of *T. vaginalis* in women include preterm delivery, low birth weight and increased mortality, as well as predisposition to HIV infection, AIDS and cervical cancer.

T. vaginalis has also been reported in the urinary tract, fallopian tubes and pelvis and can cause pneumonia, bronchitis and oral lesions.

Target Customers

- Hospital medical genetics laboratories
- Microbiology departments
- Departments of infectious diseases
- Gynaecology departments

Sexually Transmitted Diseases: Multiplex PCR Kits

One of the most interesting aspects of real-time PCR based on detection of fluorophoric-labelled oligonucleotides, such as Hydrolysis probes, and Molecular Beacons, is the possibility of being able to conveniently detect multiple targets in the same PCR reaction (Chlamydia trachomatis/Ureaplasma/M.hominis). The GML real-time multiplex PCR kits can detect, differentiate, and provide a quantitative result for these different targets without a single target influencing the detection of one of the others (cross-talk) and without loss of sensitivity.

Target Customers

- Hospital medical genetics laboratories
- Sexual health departments
- Microbiology departments
- Gynaecology departments
- Departments of infectious diseases

Candida Albicans Detection Kit

Candida Albicans is a yeast infestation, from a parasite that thrives in warm-blooded animals. In the allopathic world of medicine it is referred to as a fungus. This fungus can cause thrush and vaginal infections and spread to any part of the body that is weakened. We all have intestinal candida and when in balance it helps maintain and aid our immune system by controlling the unfriendly organisms. However, Candida Albicans takes advantage of circumstances in the body. This single cell fungi multiplies and develops toxins which circulate in the blood stream which cause an array of maladies.

Target Customers

- Hospital medical genetics laboratories
- Sexual health departments
- Microbiology departments
- Gynaecology departments

Treponema Pallidum Detection Kit

Treponema pallidum is a gram-negative bacteria which is spiral in shape. It is an obligate internal parasite which causes syphilis, a chronic human disease.

Syphilis is a sexually transmitted disease whose route of transmission is almost always through sexual contact, although there are examples of congenital syphilis via transmission from mother to child in utero or at birth. In a recent study, congenital syphilis was reported as the cause of 50% of all stillbirths in Tanzania.

The virulent strain of *T. pallidum* was first isolated in 1912 from a neurosyphilitic patient by Hideyo Noguchi, a Japanese bacteriologist. Although treatment has been available for decades, syphilis remains a health problem throughout the world. The WHO (world health organization) estimates that 12 million new cases of syphilis occur each year. This is a major problem in developing countries where prenatal testing and antibiotics are not available.

Target Customers

- Hospital medical genetics laboratories
- Microbiology departments
- Departments of infectious diseases
- Gynaecology departments
- Urology departments

Cytomegalovirus (CMV) Detection Kit

Cytomegalovirus is a virus belonging to the herpesvirus family that commonly infects humans. It is contagious and spreads from person to person, but most people never develop symptoms. It can be spread through all bodily fluids and can also spread from a pregnant mother to her baby. It can also be spread through sexual transmission.

Although cytomegalovirus infections are very common, most people who have the infection do not feel sick or even notice the infection. Others, particularly those whose immune systems are weakened, develop symptoms that resemble mononucleosis. People whose immune systems are weakened are also more likely to develop infections of the digestive tract, eyes or lungs. It is estimated that between 50% and 80% of people have had a cytomegalovirus infection by the age of 40. Cytomegalovirus typically resolves on its own and rarely requires treatment. Among the long-term effects are hearing loss, mental retardation, growth retardation and vision disorders.

Target Customers

- Hospital medical genetics laboratories
- Paediatric departments
- Departments of infectious diseases
- Gynaecology and obstetrics departments
- Organ transplantation departments
- Virology departments

Herpes Simplex Detection Kit

Herpes is an infection that is caused by a herpes simplex virus (HSV). Oral herpes causes cold sores around the mouth or face. Genital herpes affects the genitals, buttocks or anal area. Genital herpes is a sexually transmitted disease (STD). You can get it from having sex, even oral sex. The virus can spread even when sores are not present.

Mothers can also infect their babies during childbirth. The virus can be dangerous in newborn babies or in people with weak immune systems. Other disorders such as herpetic whitlow, herpes gladiatorum, ocular herpes (keratitis), cerebral herpes infection encephalitis, Mollaret's meningitis, neonatal herpes, and possibly Bell's palsy are all caused by herpes simplex viruses.

Target Customers

- Hospital medical genetics laboratories
- Virology departments
- Sexual health departments
- Gynaecology departments

Epstein-Barr virus (EBV)

Epstein-Barr virus, frequently referred to as EBV, is a member of the herpes virus family and one of the most common human viruses. The virus occurs worldwide, and most people become infected with EBV at some time during their lives. As many as 95% of adults between 35 and 40 years of age have been infected. Infants become susceptible to EBV as soon as maternal antibody protection (present at birth) disappears. Many children become infected with EBV, and these infections usually cause no symptoms or are indistinguishable from the other mild, brief illnesses of childhood.

In the United States and in other developed countries, many persons are not infected with EBV in their childhood years. When infection with EBV occurs during adolescence or young adulthood, it causes infectious mononucleosis 35% to 50% of the time. Infection with Epstein-Barr virus is associated with lymphoproliferative disorders, especially in immunocompromised hosts, and is associated with various tumours, including nasopharyngeal carcinoma and Burkitt lymphoma.

Target Customers

- Virology departments
- Oncology departments

Human herpesvirus 6 (HHV-6)

Human herpesvirus 6 (HHV-6) is one of the eight known members of the human herpesvirus family.

The child with HHV-6 usually does not appear seriously ill during this disease. HHV-6 infection is much more serious in adults and can lead to organ involvement (usually presenting as gastrointestinal symptoms or hepatitis), encephalitis, or death.

HHV-6 has been isolated from various tissues, cells, and fluid in association with the following conditions: Kikuchi lymphadenitis, Lymphoma, Lymphadenopathy, Sjögren syndrome, Sarcoidosis, Systemic lupus erythematosus, Guillain-Barré syndrome, Multiple sclerosis.

Target Customers

- Hospital medical genetics laboratories
- Departments of infectious diseases
- Mental health departments

Parvovirus B19 Detection Kit

Parvovirus B19 (B19V) is a single-stranded DNA virus of the family Parvoviridae and genus Erythrovirus. The virus is primarily spread by infected respiratory droplets; blood-borne transmission has also been reported. The secondary attack risk for exposed household persons is about 50%, and about half of that for classroom contacts.

Symptoms begin some six days after exposure and last about a week. Infected patients with normal immune systems are contagious before becoming symptomatic, but probably not after then. Individuals with B19 IgG antibodies are generally considered immune to recurrent infection, but reinfection is possible in a minority of cases. About half of adults are B19-immune due to a past infection. Parvovirus B19 causes an infection in humans only. Cat and dog parvoviruses do not infect humans. There is no vaccine available for human parvovirus B19.

Fifth disease or *erythema infectiosum* is only one of several expressions of Parvovirus B19. Parvovirus B19 is a cause of chronic anaemia in individuals who have AIDS. In adults (and perhaps some children), parvovirus B19 can lead to a seronegative arthritis which is usually easily controlled with analgesics.

Although most patients have an arrest of erythropoiesis (production of red blood cells) during parvovirus infection, it is most dangerous in patients who have sickle cell anaemia or hereditary spherocytosis, and are therefore heavily dependent on erythropoeisis due to the reduced lifespan of the red cells. This is termed "aplastic crisis" (also called reticulocytopenia) and is treated with blood transfusions.

Parvovirus infection in pregnant women is associated with hydrops fetalis due to severe foetal anaemia, sometimes leading to miscarriage or stillbirth.

Target Customers

- Hospital medical genetics laboratories
- Virology departments
- Sexual health departments
- Oncology departments

Cardiovascular Diseases (CVD) Identification Kit

Cardiovascular disease is a general name for a wide variety of diseases, disorders and conditions that affect the heart and sometimes the blood vessels as well. Cardiovascular disease is caused by disorders of the heart and blood vessels, and includes coronary heart disease (heart attacks), cerebrovascular disease (stroke), raised blood pressure (hypertension), peripheral artery disease, rheumatic heart disease, congenital heart disease and heart failure. The major causes of cardiovascular disease are tobacco use, lack of physical activity, and an unhealthy diet. Cardiovascular diseases are the world's largest killers, claiming 17.1 million lives a year.

A wide spectrum of CVD caused by inherited genetic susceptibilities is now known, and the advances made over the past 25 years in understanding the genetic basis of these disorders provide a rationale for ensuring competence in genetics for experts in the prevention of CVD. Genetic susceptibility may be caused by mutations and polymorphisms in a variety of genes, mainly involved in blood coagulation, regulation of blood pressure, and metabolism of lipids, glucose, homocysteine or iron.

Among the cardiovascular diseases, markers have important role variations in the genes for blood coagulation factor V (FV), factor II (protrombin), plasminogen activator inhibitor-1 (PAI-1), methylenetetrahydrofolate reductase (MTHFR). Moreover, an increased tendency to develop thrombosis, called also "thrombophilia", underlies the significant proportion of cases in the most common obstetric complications (recurrent pregnancy loss, foetal growth retardation, preeclampsia, abruptio placentae).

Target Customers

- Hospital medical genetics laboratories
- Cardiology departments

PRODUCT LIST

PRODUCT LIST

Kit Name (GML®)	Test Number	Detection Limit
HDV Real-TM Qual Compatible with BioRad, Stratagene, SmartCycler, AppliedBiosystems instruments	50	5x10$_2$ copies/ml
Chlamydia trachomatis Compatible with RotorGene, BioRad, Stratagene, SmartCycler, AppliedBiosystems instruments	50	5x10$_2$ copies/ml
Neisseria gonorrhoeae Detection Kit Compatible with BioRad, RotorGene, Stratagene, SmartCycler, AppliedBiosystems instruments	100	5x10$_2$ copies/ml
Ureaplasma species Detection Kit Compatible with RotorGene, BioRad, Stratagene, SmartCycler, AppliedBiosystems instruments	100	5x10$_2$ copies/ml
Mycoplasma hominis Detection Kit Compatible with RotorGene, BioRad, Stratagene, SmartCycler, AppliedBiosystems instruments	100	5x10$_2$ copies/ml
Trichomonas vaginalis Detection Kit Compatible with RotorGene, BioRad, Stratagene, SmartCycler, AppliedBiosystems instruments	100	5x10$_2$ copies/ml
Chlamydia trachomatis/Ureaplasma/M.hominis Compatible with RotorGene, BioRad , Stratagene, SmartCycler, AppliedBiosystems instruments	100	5x10$_2$ copies/ml
Mycoplasma genitalium Quant Compatible with RotorGene, BioRad, SmartCycler, Stratagene, AppliedBiosystems instruments	100	5x10$_2$ copies/ml
Candida albicans Detection Kit Compatible with RotorGene, BioRad , Stratagene, SmartCycler, AppliedBiosystems instruments	100	1x10$_3$ copies/ml
Treponema pallidum Detection Kit Compatible with RotorGene, BioRad , Stratagene, SmartCycler, AppliedBiosystems instruments	100	5x10$_2$ copies/ml
Cytomegalovirus (CMV) Compatible with RotorGene, BioRad, Stratagene, SmartCycler, AppliedBiosystems instruments	100	5x10$_2$ copies/ml
Cytomegalovirus (CMV) Quant Compatible with RotorGene, BioRad, Stratagene, SmartCycler, AppliedBiosystems instruments	100	2x10$_2$ copies/ml
HSV 1/2 Detection Kit Compatible with RotorGene, BioRad, Stratagene, SmartCycler, AppliedBiosystems instruments	100	5x10$_2$ copies/ml
EBV Quant Compatible with RotorGene, BioRad, Stratagene, SmartCycler, AppliedBiosystems instruments *Complete Real Time Test with DNA-Sorb-B extraction kit*	50	2x10$_2$ copies/ml

EBV Quant Compatible with RotorGene, BioRad, Stratagene, SmartCycler, AppliedBiosystems instruments *Real Time Amplification Kit with DNA extraction controls*	50	$2x10_2$ copies/ml
HHV6 Quant Compatible with RotorGene, BioRad, Stratagene instruments	100	$5x10_2$ copies/ml
Parvovirus B19 Detection Kit Compatible with RotorGene, BioRad, Stratagene, SmartCycler instruments	50	$2x10_2$ copies/ml
FACTORV (G1691A) Compatible with RotorGene, BioRad, SmartCycler, AppliedBiosystems instruments	50	Real Time Amplification kit
FACTORII (G20210A) Compatible with RotorGene, BioRad, SmartCycler, AppliedBiosystems instruments	50	Real Time Amplification kit
MTHFR (A1298C) Compatible with RotorGene, BioRad, SmartCycler, AppliedBiosystems instruments	50	Real Time Amplification kit
MTHFR (C677T) Compatible with RotorGene, BioRad, SmartCycler, AppliedBiosystems instruments	50	Real Time Amplification kit
PAI-1 SNP Compatible with RotorGene, BioRad, SmartCycler, AppliedBiosystems instruments	50	Real Time Amplification kit

Kit Name (GML®)	Kit Type	Number of Samples
SeqFinder Sequencing System MEFV Kit Compatible with AppliedBiosystems Genetic Analysers.	R.U.O	100
SeqFinder Sequencing System MEFV Kit Compatible with AppliedBiosystems Genetic Analysers.	R.U.O	50
SeqFinder Sequencing System HBB Kit Compatible with AppliedBiosystems Genetic Analysers.	R.U.O	100
SeqFinder Sequencing System HBB Kit Compatible with AppliedBiosystems Genetic Analysers.	R.U.O	50
SeqFinder Sequencing System CFTR Kit Compatible with AppliedBiosystems Genetic Analysers.	R.U.O	100
SeqFinder Sequencing System CFTR Kit Compatible with AppliedBiosystems Genetic Analysers.	R.U.O	50
SeqFinder Sequencing System BRCA1 and BRCA2 Kit Compatible with AppliedBiosystems Genetic Analysers.	R.U.O	5
Y Chromosome Microdeletion Detection System™ Compatible with AppliedBiosystems Genetic Analysers.	CE-IVD	25
Y Chromosome Microdeletion Detection System™ Compatible with AppliedBiosystems Genetic Analysers.	R.U.O	25