hibrigen

Product Catalogue

Nucleic Acid Purification Kits
Nucleic Acid Analysis
Standart PCR and QPCR Reagents

hibrigen

content

Hibrigen Biotechnology R&D San Tic Ltd Şti.

100% RELIABLE MOLECULAR BIOLOGY PRODUCTS

Hibrigen which is among Turkey's first domestic company engaged in the production of molecular biotechnology. It is an innovative company established in 2010 with the Ministry of Industry and Trade "Techno-Enterprise Capital Support" in order to meet various clinical laboratories and research needs.

The design, production and validation of our products are made by 100% Hibrigen. In this way; we can supply our innovative and reliable kits at any point where they are needed, quickly and at an affordable price.

Hibrigen medical devices; related to ISO has ISO 9001: 2015 and EN ISO: 13485: 2016 quality management system certificates.

We transfer the knowledge we gained from our R&D activities to the development of reliable, quality and solution-oriented products.

The primary purpose of Hibrigen; to provide professional and high quality products for scientific research. As Hibrigen, we try to do our best to make your research in the most correct way.

WHO ARE WE

As the Hibrigen family, we manufacture 100% locally in our own laboratories, in the fields of Nucleic Acid Isolation Kits, conventional PCR kits, real-time PCR kits and consumables used in molecular biology. As Hybrid, we provide primer design and synthesis, gene synthesis, Sanger and Next Generation Sequencing (NGS) services as well as our own products.

Our company, which is focused on Research and Development, is constantly renewing itself, but also creates order-specific products and provides the development and production of the products needed by the market.

Thanks to the research and development power of our company, many projects supported by TÜBİTAK and KOSGEB have been completed and many of them are still ongoing.

NUCLEIC ACID PURIFICATION KITS

Nucleic Acid Purification Kits

It is used to obtain genomic or non-genomic DNA or RNA using certain chemicals from human, animal, plant and microorganisms. The system is based on the disintegration of the cells, the unraveling of the DNA RNA and the attachment of this DNA RNA to the sephadex columns.

DNA isolation kits are standardized packages that enable us to isolate genomic and non-genomic DNA. While DNA isolation kits shorten the experimental stages, they enable us to perform DNA isolation more effectively. The kit we produce consists of platforms that allow DNA to bind (column). DNA isolation kit based on spin column method provides both time advantage and clarity in results.

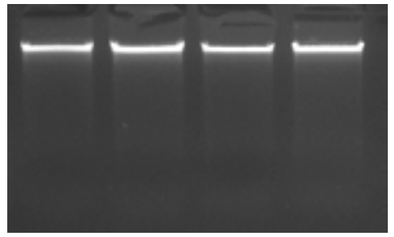
While DNA and RNA, which are used in routine tests and in many different fields (disease determinations, laboratory applications, researches, genetic tests, genetic disease determinations, etc.) are routinely extracted in the laboratory, it is aimed to minimize the loss of time and changes in the results.

It is necessary to carefully process the DNA molecules to be isolated in large pieces. Different methods are required when isolating large DNA fragments, since large fragments tend to break and be damaged, rather than smaller fragments.

Hibrigen Biotechnology develops nucleic acid purification kits with Isolation Robot and magnetic bead system by keeping up with the innovations brought by technology.

Blood DNA Isolation Kit

The HibriGen Blood DNA Isolation Kit performs DNA isolation from total blood (frozen up to 2 years and / or stored at 4°C) simply and quickly with spin column technology without using phenol / chloroform. No homogenization is required, tissue lysis (lysis) is carried out directly by proteinase-K. The buffer system has been optimized to selectively bind DNA to the column. Contaminants such as protein, divalent ions and secondary metabolites are easily removed with a simple centrifuge process. Pure DNA is dissolved in water or low-salt solution and is ready for use. DNA purified; free from contaminants and enzyme inhibitors, A260/A280 is between 1.7 and 1.9 and suitable for use in different applications.



Properties

High efficiency; 3.5-7.5 µg genomic DNA extraction in all sample types

Security; No phenol / chloroform step

Easy to use; Rapid purification with column filtration system, easily homogenizing with the help of proteinase-K without requiring mechanical disintegration

High purity; PCR, enzyme cutting etc. suitable for applications

Apps

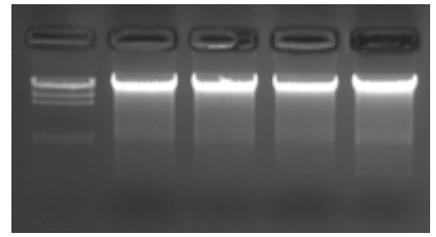
DNA purified; free from contaminants and enzyme inhibitors;
A260/A280 value is between 1.7 and 1.9; Suitable for use in molecular biology applications such as:

- Enzyme cutting applications
- PCR
- Sanger and Next Generation Sequencing
- Labeling
- Library installation

		Catalogue Number
Blood DNA Isolation kit	50 Reaction	MG-KDNA-02-50
	100 Reaction	MG-KDNA-02-100
	250 Reaction	MG-KDNA-02-250

Genomic DNA Isolation Kit from Tissue and Cell Culture

The Genomic DNA Isolation Kit from HibriGen Tissue and Cell Culture performs DNA isolation from mammalian tissues (fresh or frozen at -70°C until use) and cell culture simply and quickly with spin column technology without using phenol / chloroform. No homogenization is required, tissue lysis (lysis) is carried out directly by proteinase-K. The buffer system has been optimized to selectively bind DNA to the column. Contaminants such as protein, divalent ions and secondary metabolites are easily removed with a simple centrifuge process. Pure DNA is dissolved in water or low-salt solution and is ready for use. DNA purified; free from contaminants and enzyme inhibitors, A260/A280 is between 1.7 and 1.9 and suitable for use in different applications.



Properties

High efficiency; 3-30 µg genomic DNA yield

Security; No phenol / chloroform step

Easy to use; Rapid purification with filter system, easily tissue disintegration with the help of proteinase-K without requiring mechanical disintegration

High purity; PCR, enzyme cutting etc. suitable for applications

Apps

DNA purified; free from contaminants and enzyme inhibitors;
A260/A280 value is between 1.7 and 1.9;
Suitable for use in molecular biology applications such as:

- Enzyme cutting applications
- PCR
- Sanger and Next Generation Sequencing
- Labeling
- Library installation

		Catalogue Number
Tissue and Cell Culture Genomic DNA Isolation Kit	50 Reaction	MG-DHDNA-01-50
	100 Reaction	MG-DHDNA-01-100
	250 Reaction	MG-DHDNA-01-250

Genomic DNA Isolation Kit

The HibriGen Genomic DNA Isolation Kit spins DNA isolation from total blood (frozen up to 2 years and / or stored at 4°C) and mammalian tissues (fresh or frozen at -70 ° C until use) or cell culture without using phenol / chloroform. Performs simply and quickly with column technology. No homogenization is required, tissue lysis (lysis) is carried out directly by proteinase-K. The buffer system has been optimized to selectively bind DNA to the column. Contaminants such as protein, divalent ions and secondary metabolites are easily removed with a simple centrifuge process. Pure DNA is dissolved in water or low-salt solution and is ready for use. DNA purified; free from contaminants and enzyme inhibitors, A260/A280 is between 1.7 and 1.9 and suitable for use in different applications.

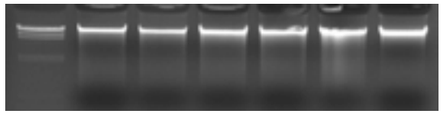
Properties

High efficiency; 3.5-30 µg genomic DNA yield

Security; No phenol / chloroform step

Easy to use; Rapid purification with filter system, easily tissue disintegration with the help of proteinase-K without requiring mechanical disintegration

High purity; PCR, enzyme cutting etc. suitable for applications



Apps

DNA purified; free from contaminants and enzyme inhibitors; A260 / A280 value is between 1.7 and 1.9; Suitable for use in molecular biology applications such as:

- Enzyme cutting applications
- PCR
- Sanger and Next Generation Sequencing
- Labeling
- Library installation

		Catalogue Number
Genomic DNA Isolation Kit	50 Reaction	MG-GDNA-01-50
	100 Reaction	MG-GDNA-01-100
	250 Reaction	MG-GDNA-01-250

DNA Isolation Kit from Buccal Swaps

DNA Isolation Kit from HibriGen Buccal Swaps performs DNA isolation from swap sample easily and quickly with spin column technology without using phenol / chloroform. No homogenization is required, tissue lysis (lysis) is carried out directly by proteinase-K. The buffer system has been optimized to selectively bind DNA to the column. Contaminants such as protein, divalent ions and secondary metabolites are easily removed with a simple centrifuge process. Pure DNA is dissolved in water or low-salt solution and is ready for use. Purified DNA; free from contaminants and enzyme inhibitors, A260/A280 is between 1.7 and 1.9 and suitable for use in different applications.

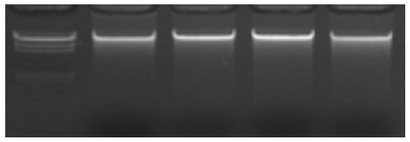
Properties

High efficiency; 1-3 µg genomic DNA yield

Security; No phenol / chloroform step

Easy to use; Rapid purification with column filtration system, easily homogenizing with the help of proteinase-K without requiring mechanical disintegration

High purity; PCR, enzyme cutting etc. suitable for applications



Apps

DNA purified; free from contaminants and enzyme inhibitors; A260/A280 value is between 1.7 and 1.9; Suitable for use in molecular biology applications such as:

- Enzyme cutting applications
- PCR
- Sanger and Next Generation Sequencing
- Labeling
- Library installation

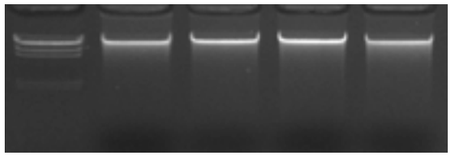
		Catalogue Number
DNA Isolation Kit from Buccal Swab	50 Reaction	MG-BSDNA-01-50
	100 Reaction	MG-BSDNA-01-100
	250 Reaction	MG-BSDNA-01-250

Bone and Tooth DNA Isolation Kit

HibriGen Bone and Teeth DNA Isolation Kit performs DNA isolation from bone or dental tissue simply and quickly with spin column technology without using phenol / chloroform. No homogenization is required, tissue lysis (lysis) is carried out directly by proteinase-K. The buffer system has been optimized to selectively bind DNA to the column. Contaminants such as protein, divalent ions and secondary metabolites are easily removed with a simple centrifuge process. Pure DNA is dissolved in water or low-salt solution and is ready for use. Purified DNA; free from contaminants and enzyme inhibitors, A260/A280 is between 1.7 and 1.9 and suitable for use in different applications.

Properties

High efficiency; 2-5 µg genomic DNA yield
Security; No phenol / chloroform step
Easy to use; Rapid purification with filter system, easily tissue disintegration with the help of proteinase-K without requiring mechanical disintegration
High purity; PCR, enzyme cutting etc. suitable for applications



Apps

DNA purified; free from contaminants and enzyme inhibitors; A260/A280 value is between 1.7 and 1.9; Suitable for use in molecular biology applications such as:

- Enzyme cutting applications
- PCR
- Sanger and Next Generation Sequencing
- Labeling
- Library installation

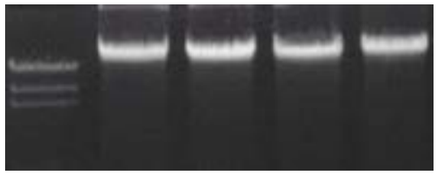
		Catalogue Number
DNA Isolation Kit from Bone and Tooth	50 Reaction	MG-KDDNA-01-50
	100 Reaction	MG-KDDNA-01-100
	250 Reaction	MG-KDDNA-01-250

DNA Isolation Kit from Saliva

The HibriGen Saliva DNA Isolation Kit performs DNA isolation from saliva simply and quickly without the use of phenol / chloroform. No homogenization is required, lysis is carried out directly by proteinase-K. Contaminants such as protein, divalent ions and secondary metabolites are easily removed with a simple centrifuge process. Pure DNA is dissolved in water or low-salt solution and is ready for use. DNA purified; free from contaminants and enzyme inhibitors; A260/A280 value is between 1.7 and 1.9; It is suitable for use in different applications.

Properties

High efficiency; 10-15 µg genomic DNA yield
Security; No phenol / chloroform step
Easy to use; Rapid purification with filter system, easily tissue disintegration with the help of proteinase-K without requiring mechanical disintegration
High purity; PCR, enzyme cutting etc. suitable for applications



Apps

DNA purified; free from contaminants and enzyme inhibitors; A260/A280 value is between 1.7 and 1.9; Suitable for use in molecular biology applications such as:

- Enzyme cutting applications
- PCR
- Sanger and Next Generation Sequencing
- Labeling
- Library installation

		Catalogue Number
DNA isolation Kit from Saliva	50 Reaction	MG-TDNA-01-50
	100 Reaction	MG-TDNA-01-100
	250 Reaction	MG-TDNA-01-250

Cell-free DNA Isolation Kit

It is based on the detection of fetal DNA (cfDNA) that circulates freely in the maternal blood. Hybrid cfDNA isolation kit; It offers a simple and reliable method that you can use to ensure high quality and rapid isolation of cell-free DNA circulating in serum, plasma, amniotic fluid and spinal fluid. Easily and quickly purifies high-quality cell-free DNA from a maximum of 600 µl of blood.

Properties

High efficiency; DNA yield of 1-100 ng/ml
Security; No phenol / chloroform step
Easy to use; Rapid purification with filter system, easily tissue disintegration with the help of proteinase-K without requiring mechanical disintegration
High Purity; qPCR, Next Generation Sequencing, Sanger Sequencing, Piro Sequencing etc. suitable for applications

Apps

- qPCR
- New Generation Sequencing, Sanger Sequencing, Pyro Sequencing
- SNP genotyping
- DNA methylation

		Catalogue Number
Cell free DNA Isolation Kit	50 Reaction	MG-CFDNA-01-50
	100 Reaction	MG-CFDNA-01-100
	250 Reaction	MG-CFDNA-01-250

Urine DNA Isolation Kit

HibriGen Urine DNA Isolation Kit performs DNA isolation from the urine sample simply and quickly with spin column technology without using phenol/chloroform. No homogenization is required, the lysis of cells (lysis) is carried out directly by proteinase-K. The buffer system has been optimized to selectively bind DNA to the column. Contaminants such as protein, divalent ions and secondary metabolites are easily removed with a simple centrifuge process. Pure DNA is dissolved in water or low-salt solution and is ready for use. DNA purified; free from contaminants and enzyme inhibitors, A260/A280 is between 1.7 and 1.9 and suitable for use in different applications.

Properties

High efficiency; 2-5 µg genomic DNA yield for 5 ml sample
Security; No phenol / chloroform step
Easy to use; Rapid purification with column filtration system, easily homogenizing with the help of proteinase-K without requiring mechanical disintegration
High Purity; PCR, enzyme cutting etc. suitable for applications

Apps

DNA purified; free from contaminants and enzyme inhibitors; A260/A280 value is between 1.7 and 1.9; Suitable for use in molecular biology applications such as:

- Enzyme cutting applications
- PCR
- Sanger and Next Generation Sequencing
- Labeling
- Library installation

		Catalogue Number
Urine DNA Isolation Kit	50 Reaction	MG-IDNA-01-50
	100 Reaction	MG-IDNA-01-100
	250 Reaction	MG-IDNA-01-250

Stool DNA Isolation Kit

The HibriGen Stool DNA Isolation Kit is a kit for microbial and host genomic DNA extraction from fresh or frozen feces, which performs DNA isolation simply and quickly using spin column technology without using phenol / chloroform. No homogenization is required, tissue lysis (lysis) is carried out directly by proteinase-K. The buffer system has been optimized to selectively bind DNA to the column. Contaminants such as protein, divalent ions and secondary metabolites are easily removed with a simple centrifuge process. Pure DNA is dissolved in water or low salt solution and is ready for use. DNA purified; free from contaminants and enzyme inhibitors, A260/A280 value is between 1.7 and 1.9 and suitable for use in different applications.

Properties

High efficiency; 3-35 µg genomic DNA yield
Security; No phenol / chloroform step
Easy to use; Rapid purification with the filter system, with the help of Proteinase-K, easy tissue disintegration without the need for mechanical disintegration
High Purity; PCR, enzyme cutting etc. suitable for applications

Apps

DNA purified; free from contaminants and enzyme inhibitors; A260/A280 value is between 1.7 and 1.9; Suitable for use in molecular biology applications such as:

- Enzyme cutting applications
- PCR
- Sanger and Next Generation Sequencing
- Labeling
- Library installation

		Catalogue Number
DNA Isolation Kit from Stool	50 Reaction	MG-GTDNA-01-50
	100 Reaction	MG-GTDNA-01-100
	250 Reaction	MG-GTDNA-01-250

DNA Isolation Kit from Plant

HibriGen Plant DNA Isolation Kit can be used for fresh, old or dried plant leaves, roots, resins, etc. It performs DNA isolation from its parts simply and quickly by using spin column technology without using phenol / chloroform. No homogenization is required, the lysis of cells (lysis) is carried out directly by proteinase-K. The buffer system has been optimized to selectively bind DNA to the column. Contaminants such as protein, divalent ions and secondary metabolites are easily removed with a simple centrifuge process. Pure DNA is dissolved in water or low-salt solution and is ready for use. DNA purified; free from contaminants and enzyme inhibitors, A260/A280 value is between 1.7 and 1.9 and suitable for use in different applications.

Properties

High efficiency; 3-10 µg genomic DNA yield in all sample types
Security; No phenol / chloroform step
Easy to use; Rapid purification with column filtration system, easily homogenizing with the help of proteinase-K without requiring mechanical disintegration
High Purity; PCR, enzyme cutting etc. suitable for applications

Apps

DNA purified; free from contaminants and enzyme inhibitors; A260 /A280 value is between 1.7 and 1.9; Suitable for use in molecular biology applications such as:

- Enzyme cutting applications
- PCR
- Sanger and Next Generation Sequencing
- Labeling
- Library installation

		Catalogue Number
DNA Isolation Kit from Plant	50 Reaction	MG-BTDNA-01-50
	100 Reaction	MG-BTDNA-01-100
	250 Reaction	MG-BTDNA-01-250

Bacterial Genomic DNA Isolation Kit

HibriGen Bacteria Genomic DNA Isolation Kit; It performs genomic DNA isolation from Gram Negative and Gram Positive Bacteria with a fast and simple method without spinning phenol / chloroform, using spin column technology. No homogenization is required, tissue lysis (lysis) is carried out directly by proteinase-K. The buffer system has been optimized to selectively bind DNA to the column. Contaminants such as protein, divalent ions and secondary metabolites are easily removed with a simple centrifuge process. Pure DNA is dissolved in water or low-salt solution and is ready for use. DNA purified; free from contaminants and enzyme inhibitors, A260/A280 is between 1.7 and 1.9 and suitable for use in different applications.

Specifications

High efficiency; 3-20 µg genomic DNA yield from 1.5-2 ml bacterial culture
Security; No phenol / chloroform step
Easy to use; Rapid purification with column filtration system, easily homogenizing with the help of proteinase-K without requiring mechanical disintegration
High purity; PCR, enzyme cutting etc. suitable for applications

Apps

DNA purified; free from contaminants and enzyme inhibitors; A260/A280 value is between 1.7 and 1.9; Suitable for use in molecular biology applications such as:

- Enzyme cutting applications
- PCR
- Sanger and Next Generation Sequencing
- Labeling
- Library installation

		Catalogue Number
Bakterial Genomic DNA isolation kit	50 Reaction	MG-BGDNA-01-50
	100 Reaction	MG-BGDNA-01-100
	250 Reaction	MG-BGDNA-01-250

Bacterial Plasmid DNA Isolation Kit

The HibriGen Bacterial Plasmid Isolation Kit is designed for fast and low-cost, high-quality plasmid DNA isolation from bacterial cultures. The kit is carried out simply and quickly with spin column technology. With each colon, 20 µg of plasmid DNA can be obtained. The kit can be successfully used to efficiently purify any size plasmid and cosmid. The actual plasmid yield and optimal culture volume depend on the number of plasmid copies used for cultivation and the medium.

Specifications

High efficiency; 10-20 µg plasmid DNA yield in one test
Security; No pheno / chloroform step
Fast; The whole procedure is only 30 minutes
High purity; PCR, enzyme cutting etc. suitable for applications

Apps

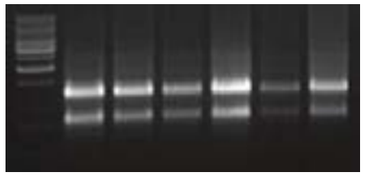
DNA purified; free from contaminants and enzyme inhibitors; A260/A280 value is between 1.7 and 1.9; Suitable for use in molecular biology applications such as:

- Enzyme cutting applications
- PCR
- Sanger and Next Generation Sequencing
- Labeling
- Library installation

		Catalogue Number
Bakterial Plasmid DNA Isolation kit	50 Reaction	MG-BPDNA-01-50
	100 Reaction	MG-BPDNA-01-100
	250 Reaction	MG-BPDNA-01-250

General RNA Isolation Kit

The HibriGen Generic RNA Isolation Kit allows for total RNA isolation using a simple method, using a wide variety of samples (tissue, surface-bound or suspended cells, whole blood) and amount. Samples are digested and homogenized in the presence of guanidium isothiocyanate (a chaotropic salt that protects RNA from endogenous RNases). After homogenization ethanol is added to the sample. Samples are then transferred to filtered tubes to which RNA can be attached. Impurities are effectively removed by washing. Pure RNA is then collected with DEPC-treated water and is ready for use for different applications.



Properties

High quality; RNA yield in the range of 1-8 µg for all sample types
Easy to use; Fast purification with filter system, easy tissue shredding without requiring mechanical shredding
High purity; Suitable for applications such as Real-Time PCR, Northern blotting, cDNA Library Apps Real-time PCR (RT-PCR)

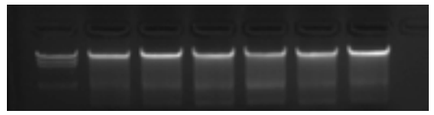
Apps

- Northern Blot
- Nuclease protection experiments RNA amplification for microarray analysis
- Preparing cDNA library

		Catalogue Number
General RNA Isolation Kit	50 Reaction	MG-RNA-01-50
	100 Reaction	MG-RNA-01-100
	250 Reaction	MG-RNA-01-250

Hibrizol

HibriGen Hibrizol is a ready-to-use reagent for total RNA isolation from tissues and cells. The reagent is a single-phase solution of phenol and guanidium isothiocyanate, which allows RNA isolation to be done in one step. During the homogenization or lysis stage, HibriGen Hibrzol protects the integrity of the RNA while ensuring the cell disruption and dissolution of the cell components. The solution is divided into two phases as organic and aqueous phase by centrifugation after chloroform addition. At this stage, RNA remained in the aqueous phase. After transferring the aqueous phase, RNA is recovered by precipitation with isopropyl alcohol. After removing the aqueous phase, the DNA and proteins in the sample are recovered by a second precipitation process. DNA is obtained from the intermediate phase using precipitation with ethanol. Proteins are recovered from the organic phase by additional precipitation with isopropyl alcohol. Auxiliary purification processes of DNA can be useful for normalizing RNA yield from sample to sample. This technique performs well in small amounts of tissue (50 - 100 mg) and cells (5 × 106) or large amounts of tissue (≥1 g) and cells (> 107) of human, animal, plant or bacterial origin. The simplicity of the Hibrizol method allows multiple samples to be processed simultaneously. The entire procedure can be completed within an hour. Total RNA isolated using Hibrizol does not contain DNA and protein contamination. For use in the isolated RNA Polymerase chain reaction (PCR), the isolated RNA is treated with DNase I suitable for amplification when two primers are contained in a single exon.



Apps

- RNA Northern Blot Analysis
- Dot Blot Hybridization
- Poly (A) + selection
- In vitro translation
- RNase protection tests
- Molecular cloning

		Catalogue Number
Hibrizol	100 mL	MG-HBRZ-01-100
	250 mL	MG-HBRZ-01-250

Gel Extraction Kit

The HibriGen Gel Extraction Kit has been specifically designed to purify DNA fragments from 50 bp to 40 kb of standard or low-melted agarose gel prepared with Tris Borate (TBE) or Tris Acetate (TAE). This system, which operates depending on the membrane, provides DNA recovery up to 40µg in as little as 25 minutes (depending on the use of the protocol and the number of samples). DNA purified; It can be used in automated fluorescent DNA sequencing, cloning, labeling, enzyme cutting or in vitro transcription / translation applications.

Specifications

Fast; Fast procedure completed in 25 minutes

High efficiency; Up to 85% recovery in DNA fragments from 50 bp-40kb

High purity; OD260 / 280 = 1.7-1.9. Ready to use for later applications such as purified DNA, PCR and restriction cutting

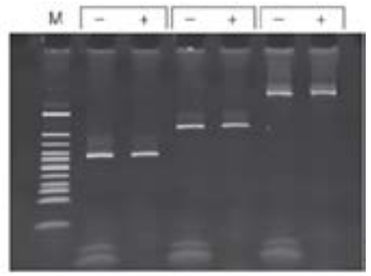
Apps

- Restriction cutting
- PCR
- DNA sequencing
- In vitro transcription

		Catalogue Number
Gel Extraction Kit	50 Reaction	MG-JEK-01-50
	100 Reaction	MG-JEK-01-100
	250 Reaction	MG-JEK-01-250

PCR and DNA Fragment Purification Kit

The HibriGen PCR and DNA Fragment Purification Kit is designed to quickly and effectively purify mixtures from PCR products, DNA fragments and other enzymatic reactions. The kit simply and quickly performs with spin column technology without the use of demanding resin processes or phenol / chloroform. The HibriGen PCR and DNA Fragment Purification Kit effectively removes salt, enzymes, indeterminate nucleotides, dNTPs and primers from the PCR and other reaction mixtures. The kit can be used to purify DNA fragments in the range of 50 bp to 10 kb and can provide up to 90% recovery. Each purification column has a total DNA binding capacity of up to 45µg and the whole procedure takes only 7 minutes. DNA purified; It is suitable for use in cloning, labeling, ligation, blotting, in situ hybridization or in vitro transcription applications.



(-) Before Purification
(+) After Purification

Properties

Speed; Quick procedure completed in 7 minutes

High efficiency; Up to 90% recovery of DNA fragments in the range of 50 bp - 10 kb

Practical; Capped filters combined with collecting tubes

High purity; OD260 / 280 = 1.7-1.9 with high purity ready for use in later applications such as DNA, PCR and restriction cutting

Apps

- Conventional restriction cutting
- Automatic fluorescent or radioactive sequencing
- PCR
- in vitro transcription

		Catalogue Number
PCR and DNA Fragment Purification Kit	50 Reaction	MG-PDP-01-50
	100 Reaction	MG-PDP-01-100
	250 Reaction	MG-PDP-01-250

Gel and PCR Purification Kit

With HibriGen Gel and PCR Purification Kit, it offers 2 different DNA cleaning options:
Gel Extraction: Specially designed for purification of DNA fragments from 50 bp to 40 kb from standard or low-melt agarose gel prepared with Tris Borate (TBE) or Tris Acetate (TAE). This system, which operates depending on the membrane, provides DNA recovery up to 40 µg in as little as 25 minutes (depending on the use of the protocol and the number of samples).
PCR / DNA Trailer Purification Kit: PCR products are designed to quickly and effectively purify mixtures from DNA fragments and other enzymatic reactions. The kit simply and quickly performs with spin column technology without the use of demanding resin processes or phenol / chloroform.

Properties

Gel Extraction Kit
Fast; Fast procedure completed in 25 minutes
High efficiency; Up to 85% recovery in DNA fragments from 50 bp to 40 kb
High purity; OD260 / 280 = 1.7-1.9, ready to use for later applications such as DNA, PCR and restriction cutting purified
PCR / DNA Trailer Purification Kit
Fast; Fast procedure completed in 7 minutes
High efficiency; up to 90% recovery of DNA fragments in the range of 50 bp - 10 kb
Practical; Capped filters combined with collecting tubes
High purity; OD260 / 280 = 1.7-1.9 with high purity ready for use in later applications such as DNA, PCR and restriction cutting

Apps

High purity DNA fragments extracted quickly and effectively are suitable for use in all commonly used molecular biology applications, such as:

- Restriction cutting
- PCR
- DNA sequencing
- In vitro transcription

		Catalogue Number
Gel and PCR Purification Kit	50 Reaction	MG-JPP-01-50
	100 Reaction	MG-JPP-01-100
	250 Reaction	MG-JPP-01-250

RNA Stabilization Solution

RNA Stabilization Solution; It is an aqueous tissue storage reagent that stabilizes and protects cellular RNA in intact, non-frozen tissue samples. RNA Stabilization Solution eliminates the need to immediately process tissue samples for later processing or to freeze samples in liquid nitrogen. Tissue pieces can be stored in the RNA Stabilization Solution to be stored without compromising the quality or amount of RNA obtained after subsequent RNA isolation. RNA Stabilization Solution can be added directly to cell pellets or to cells in the medium. Samples can then be stored frozen or unfrozen.

Specifications

Simplifies sample collection; Immediately neutralizes RNases, stabilizing RNA in tissue or cells.
More flexibility; there is no need to freeze samples in liquid nitrogen or return samples to the laboratory freezer immediately.
• It eliminates the need to freeze and crush most tissue samples.
• RNA tissue storage is flexible - it is stable for 1 day at 37°C, 1 week at 25°C, 1 month at 4°C, or -20°C.
• Compatible with many RNA isolation procedures.

Apps

• Preserving RNA integrity in tissues rich in RNases
• Transfer of animal cavities or organs to RNA Stabilization Solution to stabilize RNA during long and tedious dissections
• Sample collection at different times without having to process the samples immediately
• Archiving tissues for future microdissection
• Collection of samples where direct RNA isolation is not possible (eg hospitals, field sites)

		Catalogue Number
RNA Stabilization Solution	100 ml	MG-STBL-01

NUCLEIC ACID ANALYSIS

Nucleic Acid Analysis

Agarose gel electrophoresis is a standard method used for the separation, identification and purification of DNA molecules. Technically; it is capable of resolving DNA fragments that are simple, fast and cannot be separated by other procedures. In addition, it is possible to determine the size of DNA in the gel by painting DNA with dyes that give fluorescent radiation at low concentrations.

Gel electrophoresis is a widely used molecular investigation method to determine the molecular weight, amount and subtypes of purified nucleic acid and proteins. Electrophoretic analysis is based on the principle that molecules dissolved in an electrical field migrate according to their electrical charges. The concentration of agarose gel varies depending on the size of the base pair of DNA.

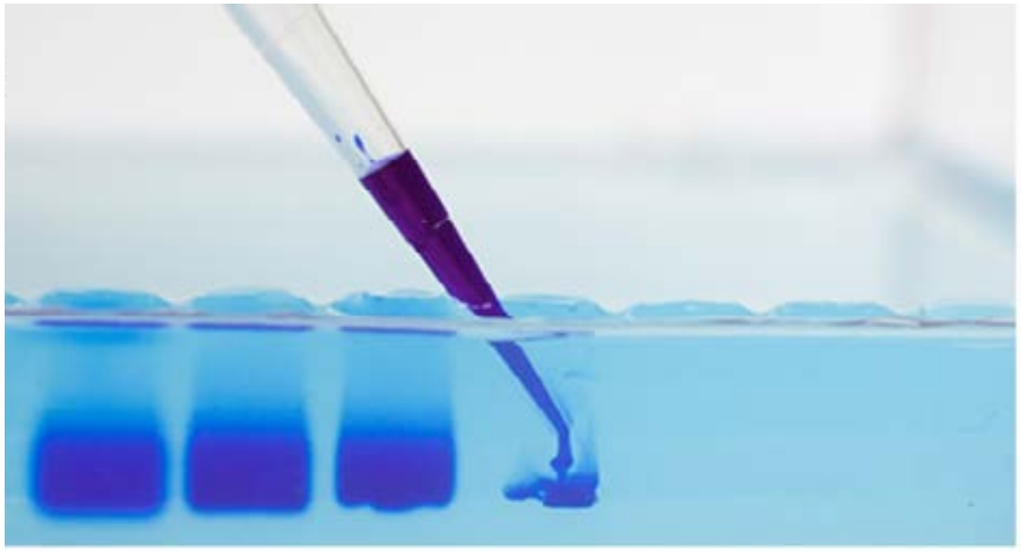
In order to determine the location of the molecule used on the gel, it is necessary to have ethidium bromide (EB) or a similar brightening agent, which has a fluorescent effect under UV light. Today, SYBR Safe Gel Paint, which is not carcinogenic and has the same properties, is used instead of EtBr.

Electrophoresis experiments are carried out in buffer solutions. Buffers used in natural double-chain DNA electrophoresis usually contain EDTA and Tris-acetate (TAE) or Tris-borate (TBE).

After the gel and buffers are prepared, the DNA sample is loaded together with the 6X Loading dye, which increases the density of the sample, allowing the DNA to spread evenly into the well, adding the color to the well, facilitating the loading of the well and moving the sample towards the anode at a predictable speed in the electric field. is provided.

Finally, in order to determine the size of the DNA, “Ladder” called marker DNA of different sizes are loaded according to the need. We have ladders according to the desired length from the smallest size (20 bp) to the largest paint (1 kb plus).

As our company, we offer the agarose, SYBR Safe Gel Paint, TAE / TBE buffers, Loading Paint and Ladders mentioned here.

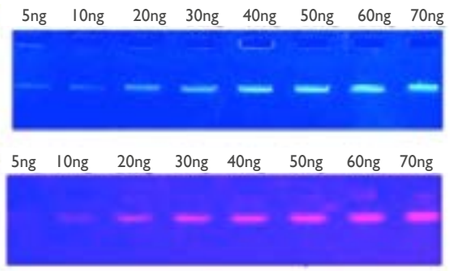


SYBR Safe Gel Paint

SYBR Safe Gel Dye is a new nucleic acid dye produced as an alternative to traditional ethidium bromide (EB) dyeing to display nucleic acids in agarose gel. This dye emits green fluorescent radiation when bound to DNA or RNA. SYBR Safe Gel dye stimulates a maximum of two fluorescents. When linked to nucleic acid, one is centered at 267 nm and the other at 294 nm. In addition, the paint emits visible radiation at 491 nm. SYBR Safe Gel Paint makes fluorescent radiation at 530 nm when it is attached to DNA.

Properties

Reliable; Does not contain toxic or carcinogenic substances
High precision; Highly sensitive staining to display DNA on agarose or acrylamide gel
Practical; Ready to use, able to take images with blue light or UV radiation, connect to RNA as well as DNA



1. Sensitivity detection of SYBR SAFE under UV light (wavelength 300nm)

2. Sensitivity detection of EB under UV light (wavelength 300nm)

		Catalogue Number
SYBR Safe Gel Dye	500 µl	MG-SSGD-01-500
	1 mL	MG-SSGD-01-1000

6X Gel Loading Paint, (Blue)

6x Gel Loading Paint is a loading buffer mixed with two tracing dyes (Bromophenol blue and xylene cyanol) for use in DNA samples in (Blue) agarose and non-denatured polyacrylamide gel electrophoresis. It contains EDTA to chelate magnesium (up to 10mM) in the enzymatic reaction, so the reaction is stopped. Bromophenol blue and xylene cyanol are standard tracing paints for electrophoresis.

Properties

Two colors for tracking DNA progression during electrophoresis
Gel does not mask DNA when exposed to UV light
EDTA binds to divalent metal ions and inhibits metal-dependent nucleases

Application

Preparation of DNA ladder, marker and samples for loading agarose or polyacrylamide gel

Ksilen Siyanol
TAE: 4160bp
TBE: 3030bp

Bromofenol Mavisi
TAE: 370bp
TBE: 220bp

6X Jel Yükleme Boyası, izleme boyalarının elektroforezi

		Catalogue Number
6X Gel Loading Paint, (Blue)	1 mL	MG-YBM-01

6X Gel Loading Paint, (Orange)

6X Gel Loading Paint (Orange) is a loading buffer mixed with single monitoring paint for agarose and non-denatured polyacrylamide gel electrophoresis. It contains EDTA to chelate magnesium (up to 10mM) in the enzymatic reaction, so the reaction is stopped. Orange G is the standard tracking paint for electrophoresis.

Properties

Single color for tracking DNA progression during electrophoresis
Gel does not mask DNA when exposed to UV light
EDTA binds to divalent metal ions and inhibits metal-dependent nucleases

Application

Preparation of DNA ladder, marker and samples for loading onto agarose or polyacrylamide gel.

Orange G
TAE/TBE: <50bp

6X Jel Yükleme Boyası, Turuncu
izleme boyalarının elektroforezi

		Catalogue Number
6X Gel Loading Paint, (Orange)	1 mL	MG-YBT-01

6X Gel Loading Paint, Trio (Green)

6X Gel Loading Paint is a loading buffer mixed with three tracing dyes for Trio (Green) agarose and non-denatured polyacrylamide gel electrophoresis. It contains EDTA to chelate magnesium (up to 10mM) in the enzymatic reaction, so the reaction is stopped. Bromophenol blue is the standard trace dye for xylene cyanol and orange G electrophoresis

Properties

Three colors for tracking DNA progression during electrophoresis
Gel does not mask DNA when exposed to UV light
EDTA binds to divalent metal ions and inhibits metal-dependent nucleases

Application

- Analysis of large DNA molecules.
- Preparation of DNA ladders, markers and samples for loading onto agarose or polyacrylamide gel.

Ksilen siyanol FF
TAE: 4160bp
TBE: 3030bp

Bromofenol Mavisi
TAE: 370bp
TBE: 220bp

Orange G
TAE/TBE: <50bp

6X Jel Yükleme Boyası, TRIO
izleme boyalarının elektroforezi

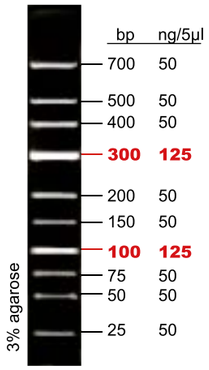
		Catalogue Number
6X Gel Loading Paint, (Green)	1 mL	MG-YBY-01

Low Range DNA Ladder

The low ladder (marker) is ideal for determining double chain DNA sizes between 25 and 700 base pairs. Ladder contains 10 linear, double chain fragments of different sizes. The fragments with 100 and 300 base pairs were increased to allow easy identification. All fragments were measured precisely and mixed during production. For 5 µl loading, all fragments are 50 ng, 100 and 300 bp fragments are 125 ng except 100 and 300 bp. It is pre-mixed with Ladder loading paint and is ready for use.

Concentration: 104 ng/µl
Typical Tapes 125 ng / 5 µl
Other Tapes 50 ng / 5 µl

Low ladder
MG-LDR-LW



5 µl/kuyu, 8 cm jel
0.5xTBE, 5V/cm, 1sa

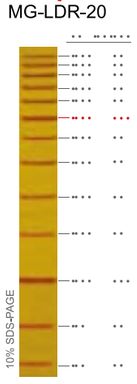
Low Range DNA Ladder	50 µg	Catalogue Number MG-LDR-LW

20 bp DNA Ladder

The 20 bp DNA ladder (marker) is ideal for determining double chain DNA sizes between 60 and 300 base pairs. Ladder contains 13 linear, double chain fragments of different sizes. The fragment, which has 100 and 200 base pairs, has been increased to allow easy identification. All fragments were measured precisely and mixed during production. For 5 µl loading, all fragments, except 100 and 200 bp, are 40 ng, and 100 and 200 bp fragments are 100 ng. It is pre-mixed with Ladder loading paint and is ready for use.

Concentration: 128 ng/µl
Typical Tapes 100 ng / 5µl
Other Tapes 40 ng / 5µl

20bp ladder
MG-LDR-20



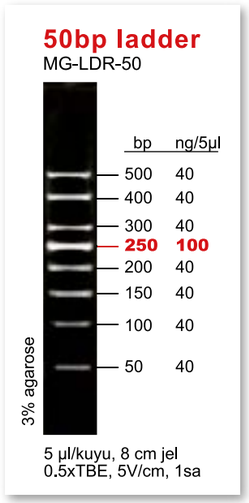
1 µl/kuyu, 20 cm jel
1xTBE, 8V/cm, 3sa

20 bp DNA Ladder	50 µg	Catalogue Number MG-LDR-20

50 bp DNA Ladder

The 50 bp DNA ladder (marker) is ideal for determining double chain DNA sizes between 50 and 500 base pairs. Ladder contains 8 linear, double chain fragments of different sizes. The fragment, which has 250 base pairs, is increased to allow easy identification. All fragments were measured precisely by both cramatography and HPLC method and mixed during production. For 5 µl loading, all trailers except 40 bp are 40 ng, and 250 bp trailer is 100 ng. It is pre-mixed with Ladder loading paint and is ready for use.

Concentration: 76 ng/µl
Band Concentrations:
Typical Tapes 100 ng / 5 µl
Other Tapes 40 ng / 5 µl

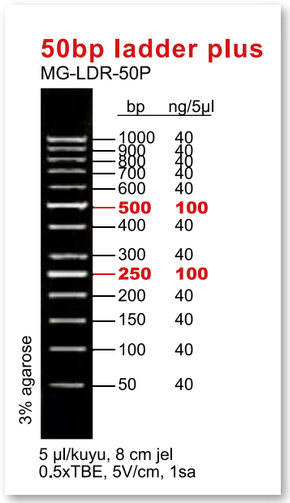


		Catalogue Number
50 bp DNA Ladder	1x50 µg	MG-LDR-50-1
	5x50 µg	MG-LDR-50-5

50 bp DNA Ladder Plus

The 50 bp DNA ladder plus is ideal for determining double chain DNA sizes between 50 and 1000 base pairs. Ladder plus contains 13 linear double chain fragments of different sizes. The fragments with 250 and 500 base pairs were increased to allow easy identification. All fragments were measured precisely by both chromatography and HPLC method and mixed during production. For 5 µl loading, all fragments, except 250 bp and 500 bp, are 40 ng, and fragments with 250 bp and 500 bp are 100 ng. It is pre-mixed with Ladder loading paint and is ready for use.

Concentration: 128 ng/µl
Band Concentrations:
Typical Tapes 100 ng / 5 µl
Other Tapes 40 ng / 5 µl

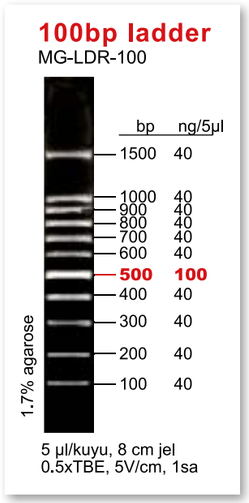


		Catalogue Number
50 bp DNA Ladder Plus	1x50 µg	MG-LDR-50P-1
	5x50 µg	MG-LDR-50P-5

100 bp DNA Ladder

The 100 bp DNA ladder (marker) is ideal for determining double chain DNA sizes between 100 and 1500 base pairs. Ladder contains 11 linear, double chain fragments of different sizes. The fragment, which has 500 base pairs, has been increased to allow easy identification. All fragments were measured precisely by both chromatography and HPLC method and mixed during production. For 5 µl loading, all fragments, except 500 bp, are 40 ng and 500 bp fragments are 100 ng. It is pre-mixed with Ladder loading paint and is ready for use.

Concentration: 100 ng/µl
Band Concentrations:
Typical Tapes 100 ng / 5 µl
Other Tapes 40 ng / 5 µl

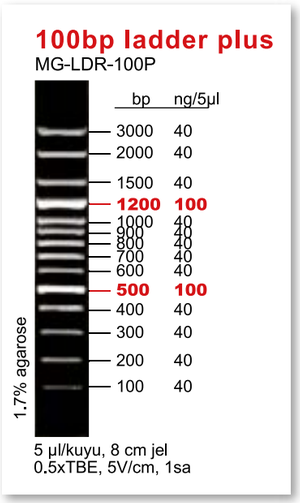


		Catalogue Number
100 bp DNA Ladder	1x50 µg	MG-LDR-100-1
	5x50 µg	MG-LDR-100-5

100 bp DNA Ladder Plus

The 100 bp DNA ladder plus is ideal for determining double chain DNA sizes between 100 and 3000 base pairs. Ladder plus contains 14 linear double chain fragments of different sizes. The fragments with 500 and 1200 base pairs have been increased to allow easy identification. All fragments were measured precisely by both chromatography and HPLC method and mixed during production. For 5 µl loading, all fragments, except 500 bp and 1200 bp, are 40 ng, and fragments with 500 bp and 1200 bp are 100 ng. It is pre-mixed with Ladder loading paint and is ready for use.

Concentration: 136 ng/µl
Band Concentrations:
Typical Tapes 100 ng / 5 µl
Other Tapes 40 ng / 5 µl

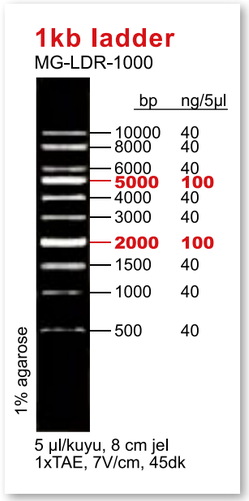


		Catalogue Number
100 bp DNA Ladder Plus	1x50 µg	MG-LDR-100P-1
	5x50 µg	MG-LDR-100P-5

1 kb DNA Ladder

The 1 kb ladder (marker) is ideal for determining double chain DNA sizes between 500 and 10000 base pairs. Ladder contains 10 linear double chain fragments of different sizes. The fragments with 2000 and 5000 base pairs were increased to allow easy identification. All fragments were measured precisely by both chromatography and HPLC method and mixed during production. For 5 µl loading, all fragments, except 2000 bp and 5000 bp, are 40 ng, and fragments with 2000 bp and 5000 bp are 100 ng. It is pre-mixed with Ladder loading paint and is ready for use.

Concentration: 104 ng/µl
Band Concentrations:
Typical Tapes 100 ng / 5 µl
Other Tapes 40 ng / 5 µl

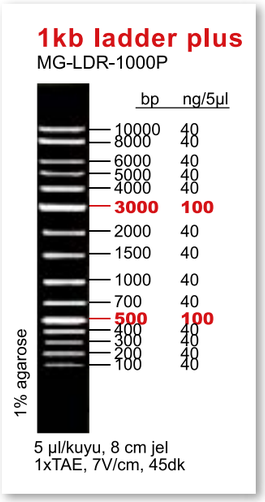


		Catalogue Number
1 kb DNA Ladder	1x50 µg	MG-LDR-1000-1
	5x50 µg	MG-LDR-1000-5

1 kb DNA Ladder Plus

The 1 kb DNA ladder (marker) Plus is ideal for determining double chain DNA sizes between 100 and 10000 base pairs. Ladder Plus contains 15 linear double chain fragments of different sizes. The fragments with 500 and 3000 base pairs have been increased to allow easy identification. All fragments were measured precisely by both chromatography and HPLC method and mixed during production. For 5 µl loading, all fragments, except 500 bp and 3000 bp, are 40 ng, and fragments with 500 bp and 3000 bp are 100 ng. It is pre-mixed with Ladder loading paint and is ready for use.

Concentration: 144 ng/µl
Band Concentrations:
Typical Tapes 100 ng / 5 µl
Other Tapes 40 ng / 5 µl

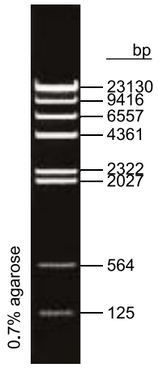


		Catalogue Number
1 kb DNA Ladder Plus	1x50 µg	MG-LDR-1000P-1
	5x50 µg	MG-LDR-1000P-5

Lambda DNA/Hind III Ladder

The 8 fragments obtained by cutting Lambda DNA with Hind III are suitable for use as a molecular weight standard for large-size DNA samples in agarose gel electrophoresis. λDNA / Hind III is mixed with loading buffer and ready for use.

Lambda DNA/*Hind* III
MG-LDR-LH3



5 µl/kuyu, 8 cm jel
1xTAE, 7V/cm, 45dk

		Catalogue Number
Lambda DNA/Hind III Ladder	1x50 µg	MG-LDR-LH3-1
	5x50 µg	MG-LDR-LH3-5

50X TAE Buffer

TAE (Tris-Acetate-EDTA) is suitable for use in molecular biology at a concentration of 50X. Liquid form in 50X concentration can be diluted with distilled water or deionized water, making it easy to prepare 1X working solution. The pH (at 1X concentration) is in the range of 8.0-8.2 at 25°C. It does not contain protease, DNase and RNase. TAE buffer is generally used in all DNA electrophoresis (for acrylamide and agarose gel) applications including sequencing. TAE buffer is often used to ensure that fragments higher than 1500 bp are seen at better resolution.

		Catalogue Number
50X TAE Buffer	500 mL	MG-TAE-01-500
	1000 mL	MG-TAE-01-1000

10X TBE Buffer

TBE (Tris-Borat-EDTA) is suitable for use in molecular biology at a concentration of 10X. The liquid form in 10X concentration can be diluted with distilled water or deionized water, making it easy to prepare 1X working solution. pH (at 1X concentration) is in the range of 8.0-8.2 at 25°C. It does not contain protease, DNase and RNase. TBE buffer is generally used in all DNA electrophoresis (for acrylamide and agarose gel) applications including sequencing. TBE buffers are often used to ensure that fragments lower than 1500 bp are seen at better resolution. Thanks to its high buffering capacity and low conductivity compared to TAE, TBE buffer is more suitable for electrophoresis application at high voltages (> 150V).

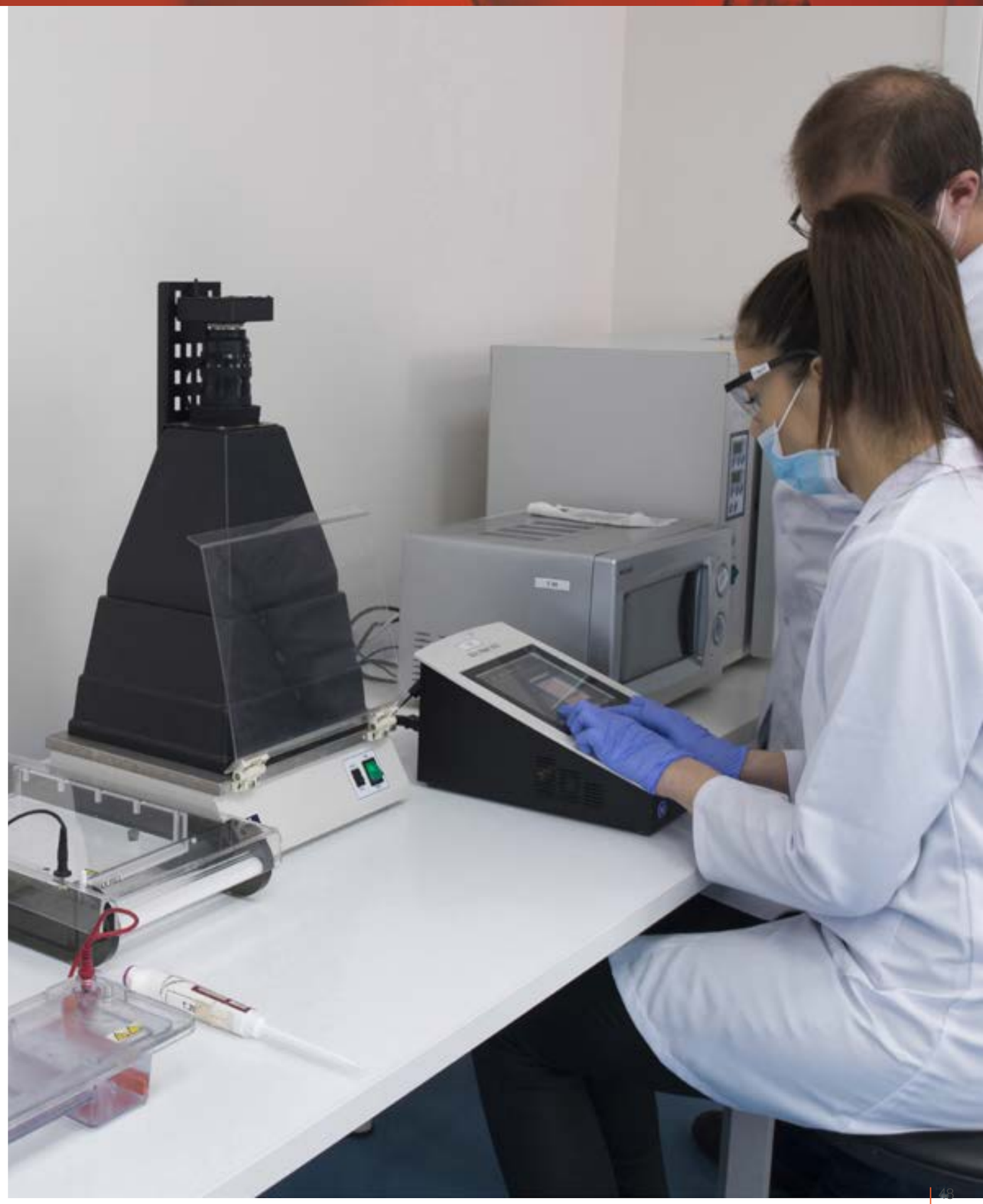
Properties

Practical; Easy to use by diluting with distilled or ionized water

High purity; Protease, DNase and RNase free, suitable for use in molecular biology

High discrimination power; Suitable for working at high voltages, ideal for observing small fragments on the gel with higher resolution

		Catalogue Number
10X TBE Buffer	500 mL	MG-TBE-01-500
	1000 mL	MG-TBE-01-1000



Standard PCR and QPCR Reagents

Standart PCR and qPCR Reagents

Polymerase chain reaction (PCR) is a simple, effective, and particularly widely used enzymatic technique in the field of molecular biology, allowing to replicate a specific DNA fragment from the DNA complex pool. Many PCR techniques have emerged with the development of the PCR technique until the present day. Some of these techniques are Real Time PCR, Quantitative PCR, Reverse Transcriptase PCR, Nested PCR and Multiplex PCR.

A wide variety of enzymes and components are sold on the market for the application of these techniques. As Hibrigen Biotechnology, we are ahead of our competitors by providing ease of use and transportation in this field. In addition, unlike big companies, on-site demo service is provided in case of support related to the product. Customer satisfaction is prioritized in optimization and development of the product according to the need.

2X Taq Master Mix

HibriGen 2X Taq Master Mix is a pre-mixed ready-to-use solution; Taq DNA Polymerase contains reaction buffer in optimal concentration for efficient amplification of template DNA by dNTPs, Mg^{+2} and PCR. In order to be ready for the PCR reaction, it is sufficient to add only template DNA and primers. This pre-mixed formulation is ideal to save time and prevent contamination that may occur during the pipetting steps required for PCR setup. The mixture retains all the properties of Taq DNA Polymerase.

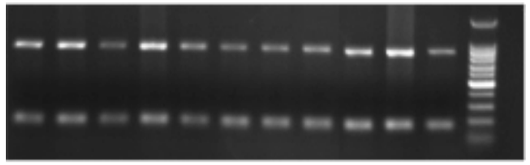
Taq DNA Polymerase is suitable for amplification of target DNA up to 5kb. Elongation rate is ~ 0.9-1.2kb / minute (70-750C). It has 5 '- 3' polymerase activity, 5 '- 3' exonuclease activity; however, there is no 3 '- 5' exonuclease activity.

Specifications

Handy; In order to be ready for PCR reaction, only primer and template DNA is added and it provides minimum optimization opportunity
High efficiency; Saves time by simplifying the process steps
Repeatability; Minimizes the risk of errors caused by contamination and incorrect pipetting

Apps

- PCR with high product output
- Routine PCR with high repeatability
- PCR product formations for TA Cloning



		Catalogue Number
2X Taq Master Mix	25 µl 80 Reax.	MG-TAQMX-01-80
	25 µl 400 Reax.	MG-TAQMX-01-400

2X TaqMan Master Mix

HibriGen 2X TaqMan Master Mix is a pre-mixed ready-to-use solution; Taq DNA Polymerase contains reaction buffer in optimal concentration for efficient amplification of template DNA by dNTPs, Mg^{+2} and PCR. It is specially designed for TaqMan probe-based real-time PCR analysis of DNA samples (2X TaqMan Master Mix is designed for highly efficient quantitative PCR using TaqMan® probe-based chemistry). To prepare the PCR mixture, it is sufficient to add only template DNA and primary-probe. This pre-mixed formulation is ideal to save time and prevent contamination that may occur during the pipetting steps required for PCR setup. The mixture retains all the properties of Taq DNA Polymerase.

Taq DNA Polymerase is suitable for amplification of target DNA up to 5 kb. Elongation rate is ~ 0.9-1.2kb / min (70-75°C). It has 5 'to 3' polymerase activity.

Specifications

Handy; In order to be ready for PCR reaction, only primer and template DNA is added and it offers minimum optimization opportunity
High efficiency;Saves time by simplifying the process steps
Repeatability; Minimizes the risk of errors caused by contamination and incorrect pipetting

Apps

- Gene expression analysis
- SNP genotyping experiments
- Chip
- Number of copies variation

		Catalogue Number
2X TaqMan Master Mix	25 µl 80 Reax.	MG-TAQMX-02-80
	25 µl 400 Reax.	MG-TAQMX-02-400

2X LongTaq Master Mix

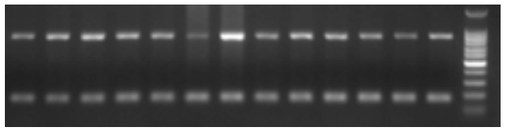
HibriGen 2X Long Taq Master Mix is a premixed, ready-to-use solution. The PCR system contains the optimal concentration of reaction buffer, DNA Polymerase, dNTPs and Mg^{+2} for the most efficient amplification of the template DNA. To prepare the final PCR reaction, it is sufficient to add only template DNA and primers. This pre-mixed formulation is ideal to save time and prevent contamination that may occur during the pipetting steps required for PCR setup. The mixture retains all the properties of LongTaq DNA Polymerase. In addition, adding PCR Enhancer contributes to high precision.

Specifications

Ease of Use; It is sufficient to add only template DNA and primers to prepare the PCR reaction
High efficiency; Saves time with the presence of easy processes
Repeatability; Minimizes the risk of errors caused by contamination and incorrect pipetting Longer fragments
Longer fragments; Amplifies long stencil DNA up to 40 kb
PCR amplification of complex pattern DNA (eg GC rich patterns etc.)
High accuracy; T3 times more accurate than Taq polymerase

Apps

- PCR amplification of complex pattern DNA (eg GC rich patterns etc.)
- PCR amplification of long form DNA; Long mold DNA amplification up to 40 kb and above
- DNA sequencing
- PCR for cloning



		Catalogue Number
2X LongTaq Master Mix	25 µl 80 Reax.	MG-LTAQMX-01-80
	25 µl 400 Reax.	MG-LTAQMX-01-400

2X B Master Mix

HibriGen 2X B Master Mix is a premixed ready-to-use solution; Taq DNA Polymerase contains Reaction Buffer in optimal concentration for efficient amplification of template DNA by dNTPs, Mg^{+2} and PCR. To prepare the final PCR reaction, it is sufficient to add only template DNA and primers. This pre-mixed formulation is ideal to save time and prevent contamination that may occur during the pipetting steps required for PCR setup. The mixture retains all the properties of Taq DNA Polymerase.

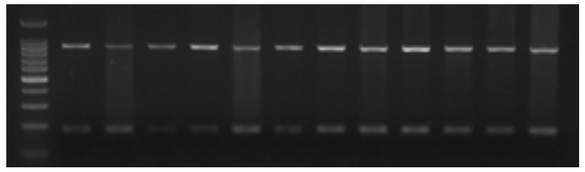
Taq DNA Polymerase is suitable for amplification of target DNA up to 5 kb. Elongation rate is ~ 0.9-1.2 kb/minute (70-75°C). It has 5‘- 3’ polymerase activity, 5‘- 3’ exonuclease activity; however, there is no 3‘- 5’ exonuclease activity.

Specifications

Ease of Use; Provides minimal optimization with only primer and template DNA insertion to be ready for PCR reactio
High efficiency; Saves time by simplifying the process steps
Repeatability; Minimizes the risk of errors caused by contamination and incorrect pipetting

Apps

- PCR with high product output
- Routine PCR with high repeatability
- PCR product formations for TA Cloning



		Catalogue Number
2X B Master Mix	25 µl 80 Reax.	MG-BMX-01-80
	25 µl 400 Reax.	MG-BMX-01-400

2X GC Master Mix

HibriGen 2X GC Master Mix is a premixed ready-to-use solution; Taq DNA Polymerase contains Reaction Buffer in optimal concentration for efficient amplification of template DNA by dNTPs, Mg^{+2} and PCR. To prepare the final PCR reaction, it is sufficient to add only template DNA and primers. This pre-mixed formulation is ideal to save time and prevent contamination that may occur during the pipetting steps required for PCR setup. The mixture retains all the properties of Taq DNA Polymerase. GC is also a good choice for amplifying complex pattern DNA like rich regions.

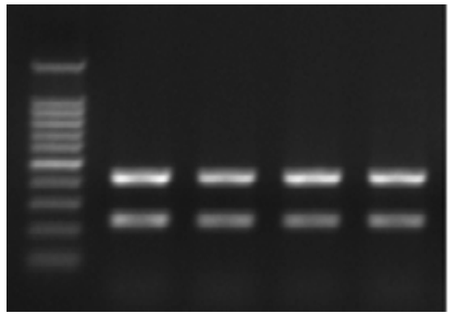
Taq DNA Polymerase is suitable for amplification of target DNA up to 5 kb. Elongation rate is ~ 0.9-1.2 kb/minute (70-75°C). It has 5‘- 3’ polymerase activity, 5‘- 3’ exonuclease activity. However, there is no 3‘- 5’ exonuclease activity.

Specifications

Ease of Use; Provides minimal optimization with only primer and template DNA insertion to be ready for PCR reaction
High efficiency; Saves time by simplifying the process steps
Repeatability; Minimizes the risk of errors caused by contamination and incorrect pipetting

Apps

- PCR with high product output
- Routine PCR with high repeatability
- PCR product formations for TA Cloning



		Catalogue Number
2X GC Master Mix	25 µl 80 Reax.	MG-GCMX-01-80
	25 µl 400 Reax.	MG-GCMX-01-400

2X Hot Start Taq Master Mix

HibriGen 2X Hot Start Taq Master Mix is a pre-mixed ready-to-use solution; Hot Start Taq DNA Polymerase contains reaction buffer at optimal concentration for efficient amplification of template DNA by dNTPs, Mg^{+2} and PCR. In order to be ready for the PCR reaction, it is sufficient to add only template DNA and primers. This pre-mixed formulation is ideal to save time and prevent contamination that may occur during the pipetting steps required for PCR setup. The mixture preserves all the properties of Hot Start Taq DNA Polymerase.

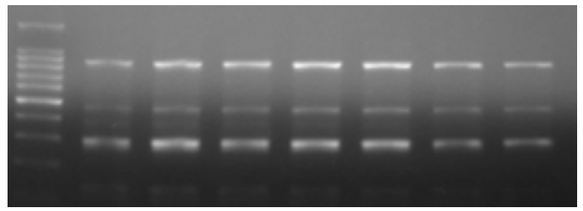
Hot Start Taq DNA Polymerase is suitable for amplification of target DNA up to 5 kb. Elongation rate is ~ 0.9-1.2 kb/minute (70-75°C). It has 5‘ to 3’ polymerase activity, but in the absence of 3‘ to 5’ exonuclease activity, 3’-dA protrusions (Poly-A tails) appear in the PCR product.

Specifications

Ease of Use; Provides minimal optimization with only primer and template DNA insertion to be ready for PCR reaction
High efficiency; Saves time by simplifying the process steps
Repeatability; Minimizes the risk of errors caused by contamination and incorrect pipetting

Apps

- PCR with high product output
- Routine PCR with high repeatability
- PCR product formations for TA Cloning



		Catalogue Number
2X Hot Start Taq Master Mix	25 µl 80 Reax.	MG-HSTAQMX-01-80
	25 µl 400 Reax.	MG-HSTAQMX-01-400

Hot Start Taq DNA Polymerase

Concentration: 5U/µl

Hot Start Taq DNA Polymerase is a special chemically modified Taq polymerase, the enzyme activity depends on the temperature increase and the enzyme is inactive at room temperature. In this way, it provides higher specificity by reducing non-specific products. The amplification length is up to 5 kb and the amplification speed can reach 2 min/kb (up to 20 s/kb). Hot Start Taq Polymerase has 5‘-3’ polymerase activity, but 3‘- 5’ exonuclease activity. Creates PCR products containing 3‘ poly A tails that can be used in TA cloning. Since Hot Start Taq DNA Polymerase is created with advanced chemical modification, the use of animal resources is zero. It is much more stable than the antibody-modified Hot Start polymerase. Productivity; higher than chemically modified polymerase and the initial denaturation time can be reduced up to 3 minutes.

Content

Hot Start Taq DNA Polymerase (5 U/µl)	50 µl
Hot Start Buffer (Mg^{+2} plus)	1.25 ml

Specifications

High specificity; It has the ability to reduce non-specific products as its chemical modification is active at high temperature

High Sensitivity; Capable of capturing target DNA with low copy number

Thermostable; More than 40 minutes half-life in 95°C incubation Accept modified nucleotides (eg Biotin, digoxigenin, etc.) as substrate Produce 3’-dA protruding PCR products

Apps

- Amplification of DNA fragments up to 5 kb
- High specificity routine PCR applications
- Colony PCR
- Genotyping

		Catalogue Number
Hot Start Taq DNA Polymerase	250 U	MG-HSTAQ-01

Taq DNA Polymerase

Concentration: 5U/µl

Taq DNA Polymerase is a recombinant DNA Polymerase enzyme derived from Thermus aquaticus bacteria, a thermophilic bacteria. Its molecular weight is 94 kDa and Taq DNA Polymerase is suitable for amplification of target DNA up to 5 kb. The elongation rate is ~ 0.9 - 1.2 kb /minute (70-75°C). It has 5‘ - 3’ polymerase activity, 5‘ - 3’ exonuclease activity. However, there is no 3‘ - 5’ exonuclease activity.

Content

Taq DNA Polymerase	100 µl
10xPCR Buffer KCl	1.25 ml
10xPCR Buffer NH_2SO_4	1.25 ml
25 mM $MgCl_2$	1.25 ml

Apps

- Amplification of DNA fragments up to 5 kb in length
- DNA Marking
- DNA sequencing
- PCR for cloning

		Catalogue Number
Taq DNA Polymerase	500 U	MG-KTAQ-01

LongTaq DNA Polymerase

Concentration: 5U/µl

LongTaq DNA polymerase was created by combining two thermostable DNA polymerases, Taq and Pfu DNA polymerase, with a special formulation to amplify large fragments. This specially formulated LongTaq DNA Polymerase has been shown to amplify long patterns such as λ phage genomes up to 20 kb. LongTaq DNA Polymerase is also a good choice for amplifying complex pattern DNA such as GC rich regions. Using LongTaq DNA Polymerase in the PCR reaction creates PCR products containing 3‘ poly A tails that can be used in TA cloning.

Content

LongTaq DNA Polymerase	50 µl
10xPCR Buffer I (KCl)	1.25 ml
10xPCR Buffer II (KCl ve NH_2SO_4)	1.25 ml
PCR Booster (Enhancer)	500 µl

Specifications

High accuracy; 3 times more accuracy than Taq polymerase
Longer fragments; amplify long-form DNA up to 20 kb
Creates 3 ‘Poly A tails and blunt end PCR products

Apps

- PCR amplification of complex pattern DNA (eg GC rich patterns and repeating sequences)
- PCR amplification of long form DNA
- DNA sequencing
- PCR for cloning

		Catalogue Number
LongTaq DNA Polimerase	250 U	MG-LTAQ-01

Pfu DNA Polymerase

Concentration: 5U/µl

Pfu DNA Polymerase is a recombinant DNA Polymerase enzyme, which has a much higher proofreading property and thermal stability than other DNA polymerases obtained from Pyrococcus furiosus organism, which is a hyperthermophilic archaea and has a molecular weight of 90 kDa. It is suitable for amplification of target DNA up to 2 kb. The elongation rate is ~ 0.2 - 0.4 kb/minute (70-75°C). Pfu DNA Polymerase has a 3’ - 5‘ exonuclease proofreading activity, which allows for the correction of incorrect binding of nucleotides. Thanks to this feature, PCR products made using Pfu DNA polymerase have less error than PCR products made using Taq DNA polymerase. Using Pfu DNA Polymerase, blind-end PCR products suitable for use in blind-end vectors used in cloning can be obtained. Pfu DNA Polymerase is the best technique required for high-throughput DNA synthesis.

Content

Pfu DNA Polymerase	200 µl
10xPCR Buffer (Mg^{+2} plus)	2x1.25 ml
25 mM $MgCl_2$	2x1.25 ml

App

- Highly reliable PCR for cloning blind end vectors
- Highly reliable primary elongation and PCR reactions
- Site-directed mutations

		Catalogue Number
Pfu DNA Polymerase	250 U	MG-PFU-01-250
	1000 U	MG-PFU-01-1000

2,5 mM dNTP Mix

HibriGen dNTP Mix (mixture) is a pH-7.0 diluted solution containing dATP, dGTP, dCTP and dTTP with a final concentration of 2.5 mM each, 2.5 mM. This mixture is designed to save time and provide high repeatability in PCR and other applications. It allows mixing pipetting steps and reducing the risk of errors during the reaction setup phase. It maintains its stability in multiple freeze-thaw operations.

Apps

It can be used directly in PCR, long PCR, RT-PCR, cDNA synthesis, primary extension, DNA sequencing and marking studies.

		Catalogue Number
2,5 mM dNTP Mix	1 mL	MG-DNTP-025-1
	5x1 mL	MG-DNTP-025-5

10 mM dNTP Mix

HibriGen dNTP Mix (mixture) is a pH-7.0 diluted solution containing dATP, dGTP, dCTP and dTTP, whose final concentrations of 10 mM are 10 mM each. This mixture is designed to save time and provide high repeatability in PCR and other applications. It allows mixing pipetting steps and reducing the risk of errors during the reaction setup phase. It maintains its stability in multiple freeze-thaw operations.

Apps

It can be used directly in PCR, long PCR, RT-PCR, cDNA synthesis, primary extension, DNA sequencing and marking studies.

		Catalogue Number
10 mM dNTP Mix	1 mL	MG-DNTP-10-1
	5x1 mL	MG-DNTP-10-5

100 mM dNTP Set

The HibriGen dNTP set contains 100 mM dATP, dCTP, dTTP, dGTP solutions, each prepared in a separate bottle. By providing nucleotides separately, the dNTP Set offers maximum flexibility in preparing reaction mixes for different applications. It maintains its stability in multiple freeze-thaw operations.

4x0.25 ml – Consists of 4 bottles in total.

Volume:

100 mM dATP 0.25 ml
100 mM dCTP 0.25 ml
100 mM dGTP 0.25 ml
100 mM dTTP 0.25 ml

Apps

It can be used directly in PCR, long PCR, RT-PCR, cDNA synthesis, primary extension, DNA sequencing and marking studies.

General features:

dATP : C10H13N5O12P3Na3; MW = 557.2; λmax=259nm; ε=15.2x103 M-1cm-1 at pH 7.0;
dGTP : C10H13N5O13P3Na3; MW = 573.2; λmax=253nm; ε=13.7x103 M-1cm-1 at pH 7.0.
dCTP : C9H13N3O13P3Na3; MW = 533.1; λmax=271nm; ε=9.3x103 M-1cm-1 at pH 7.0.
dTTP : C10H14N2O14P3Na3; MW = 548.1; λmax=267nm; ε=9.6x103 M-1cm-1 at pH 7.0.

		Catalogue Number
100 mM dNTP Set	4x0,25 mL	MG-DNTP-01

25 mM $MgCl_2$

25 mM $MgCl_2$ solution with 0.22 µm membrane filter is used for optimizing magnesium ion concentration in PCR.

Quality control

Quality control is achieved by amplifying a single copy gene from human genomic DNA.

		Catalogue Number
25 mM $MgCl_2$	1 mL	MG-MGCL-01-1
	5x1 mL	MG-MGCL-01-5

2X SYBR Green qPCR Mix

HibriGen 2X SYBR Green qPCR Mix is designed for high efficiency and high performance Real Time PCR (qPCR). The kit contains Taq DNA Polymerase enzyme developed by molecular evolution process. As a result, it is a unique mixture prepared specifically for qPCR using SYBR Green I biochemistry.

HibriGen 2X SYBR Green qPCR Mix is a convenient premix of components (excluding primers, template DNA and water) for performing real-time Polymerase Chain Reaction (PCR) using SYBR Green I dye with improved precision and specificity. SYBR Green I dye binds to double chain DNA, thereby emitting fluorescent signal showing the amount of double chain DNA formed during PCR.

Specifications

- This product can be used with glass capillary system (such as LightCycler, Roche Molecular Systems, Inc.)
- This product can be used for passive reference systems (such as ABI PRISM® 7700, Applied Biosystems, Inc.). Passive reference paint does not affect any other systems

Apps

- Gene expression analysis
- DNA / RNA target detection
- Number of copies variation analysis

		Catalogue Number
2X SYBR Green qPCR Mix	25 µl 80 Reax.	MG-SYBR-01-80
	25 µl 400 Reax.	MG-SYBR-01-400

2X SYBR Green qPCR Mix (High Rox^{+})

HibriGen 2X SYBR Green qPCR Mix (High Rox +) is designed for high efficiency and high performance Real Time PCR (qPCR). The kit contains Taq DNA Polymerase enzyme developed by molecular evolution process. As a result, it is a unique mixture prepared specifically for qPCR using SYBR Green I biochemistry.

HibriGen 2X SYBR Green qPCR Mix (High Rox +) is a suitable premix of components (excluding primers, template DNA and water) for performing real-time Polymerase Chain Reaction (PCR) using SYBR Green I dye with improved precision and specificity. SYBR Green I dye binds to double chain DNA, thereby emitting fluorescent signal showing the amount of double chain DNA formed during PCR. This product is used for the detection and amplification of DNA during qPCR in the ABI real-time device, which provides normalization with a high Rox reference dye with a final concentration of 500 nM.

Specifications

- This product can be used in ABI Real-time systems that require high concentrations of Rox reference dye.

Apps

- Gene expression analysis
- DNA / RNA target detection
- Number of copies variation analysis

		Catalogue Number
2X SYBR Green qPCR Mix (High Rox+)	25 µl 80 Reax.	MG-SYBR-HROX-01-80
	25 µl 400 Reax.	MG-SYBR-HROX-01-400

2X SYBR Green qPCR Mix (Low Rox+)

HibriGen 2X SYBR Green qPCR Mix (Low Rox +) is designed for high efficiency and high performance Real - Time PCR. The kit contains Taq DNA Polymerase enzyme developed by molecular evolution process. As a result, it is a unique mixture prepared specifically for qPCR using SYBR Green I biochemistry.

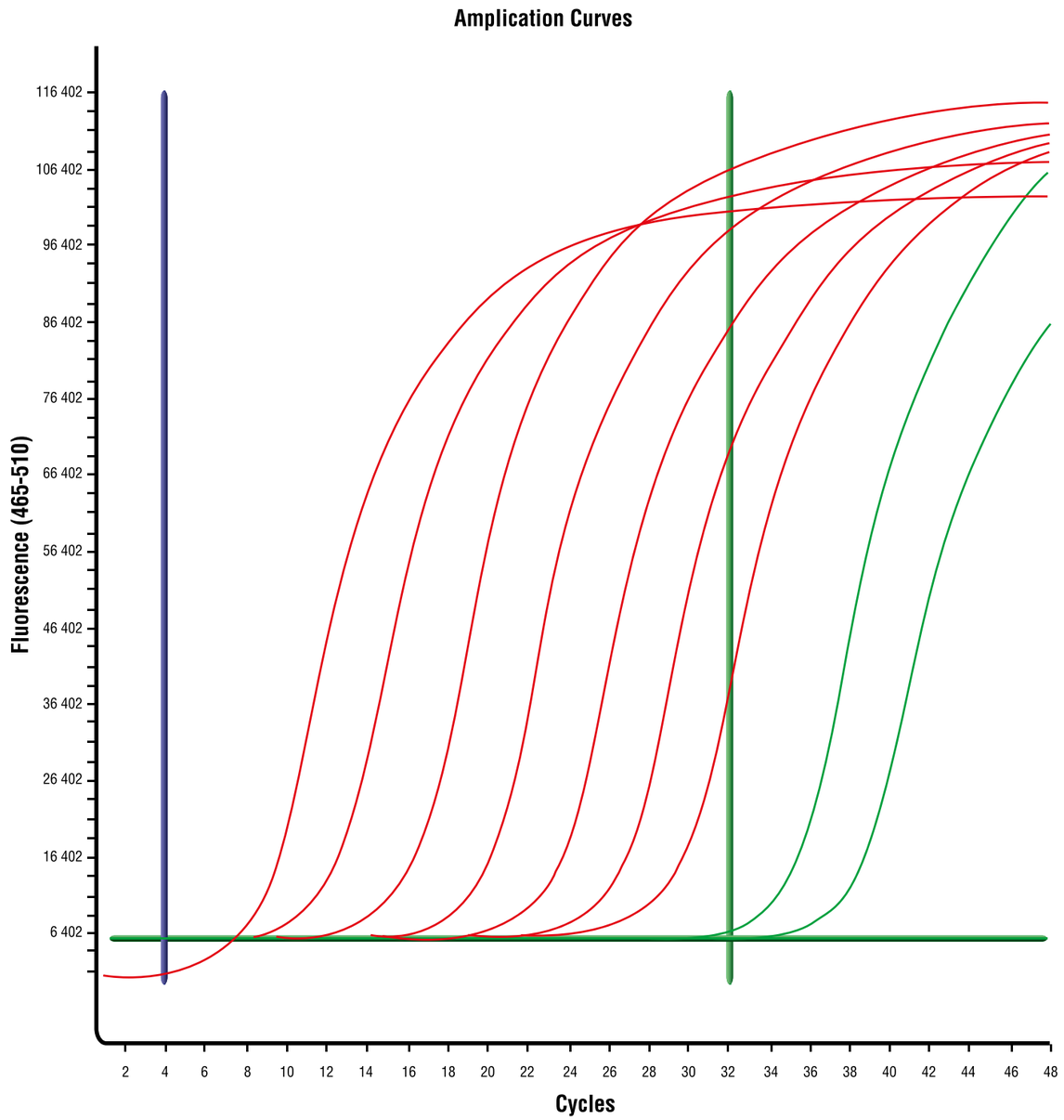
HibriGen 2X SYBR Green qPCR Mix (Low Rox +) is a suitable premix of components (excluding primers, template DNA and water) for performing real-time Polymerase Chain Reaction (PCR) using SYBR Green I dye with improved precision and specificity. SYBR Green I dye binds to double chain DNA, thereby emitting fluorescent signal showing the amount of double chain DNA formed during PCR. This product is used for the detection and amplification of DNA during qPCR in the ABI real-time device, which provides normalization with Low Rox reference dye with a final concentration of 25 nM.

Specifications

• This product can be used in ABI Real-time systems that require low concentration of Rox reference dye.

Apps

• Gene expression analysis
• DNA / RNA target detection
• Number of copies variation analysis



		Catalogue Number
2X SYBR Green qPCR Mix (Low Rox+)	25 µl 80 Reax.	MG-SYBR-LROX-01-80
	25 µl 400 Reax.	MG-SYBR-LROX-01-400

OTHER PRODUCTS

Proteinase K (Lyophilized)

Proteinase K is an endolytic protease that cuts peptide bonds in the carboxylic regions of aliphatic, aromatic or hydrophobic amino acids. Proteinase K is classified as a serine protease. The smallest peptides hydrolyzed by this enzyme are tetra peptides.

Specifications
Active in a wide range of reaction products.

Apps
- Genomic DNA isolation from tissues and culture cells
- DNA and RNA isolation from tissues or cells, removal of DNase and RNases
- Determination of enzyme sites
- To increase the cloning effect of PCR products

Source
It was obtained by Tritirachium album cells.

Molecular Weight
28.9 kDa monomer

		Catalogue Number
Proteinase K (Lyophilized)	20 mg	MG-PASEK-01-20
	100 mg	MG-PASEK-01-100
	1gr	MG-PASEK-01-1000

Proteinase K (Liquid) 20 mg/ml

Proteinase K is an endolytic protease that cuts peptide bonds in the carboxylic regions of aliphatic, aromatic or hydrophobic amino acids. Proteinase K is classified as a serine protease. The smallest peptides hydrolyzed by this enzyme are tetra peptides.

Specifications
Active in a wide range of reaction products

Apps
- Genomic DNA isolation from tissues and culture cells
- DNA and RNA isolation from tissues or cells, removal of DNase and RNases
- Determination of enzyme sites
- To increase the cloning effect of PCR products

Source
It was obtained by Tritirachium album cells.

Molecular Weight
28.9 kDa monomer

		Catalogue Number
Proteinase K (Liquid) 20 mg/ml	1 ml	MG-PASEK-02-1
	5 ml	MG-PASEK-02-5

RNase A (Lyophilized)

RNase A is an endoribonuclease that specifically cleaves single strand RNA from ends C and U. It separates the phosphodiester bond between the 5'-ribose of a nucleotide and the phosphate group bound to the 3' ribose of an adjacent pyrimidine nucleotide.

Apps

- Plasmid and genomic DNA preparation
- RNA removal from recombinant protein samples.
- Ribonuclease protection experiments
- Mapping of single base mutations in DNA or RNA

Molecular Weight

13.7 kDa monomer

		Catalogue Number
RNase A (Lyophilized)	20 mg	MG-RNAZ-01-20
	100 mg	MG-RNAZ-01-100
	1gr	MG-RNAZ-01-1000

RNase A (Liquid) 20 mg/ml

RNase A is an endoribonuclease that specifically cleaves single strand RNA from ends C and U. It separates the phosphodiester bond between the 5'-ribose of a nucleotide and the phosphate group bound to the 3' ribose of an adjacent pyrimidine nucleotide.

Apps

- Plasmid and genomic DNA preparation
- RNA removal from recombinant protein samples.
- Ribonuclease protection experiments
- Mapping of single base mutations in DNA or RNA

Molecular Weight

13.7 kDa monomer

		Catalogue Number
Rnase A (Liquid) 20 mg/ml	1 ml	MG-RNAZ-02-1
	5 ml	MG-RNAZ-02-5

DNase I (Lyophilized)

DNase I (RNase-free) is an endonuclease that specifically cleaves DNA to release di-, tri- and oscillations. Oligonucleotide products with 5'-phosphorylated and 3'-hydroxylated tips. DNase I, single and double stranded DNA, chromatin and RNA: DNA hybrids.

Specifications
Recombinant enzyme

Apps
- DNA template degradation in transcription reactions
- Extraction of pollutant genomic DNA from RNA samples
- DNase I footprinting (in vitro protein-DNA binding analysis)
- Nick (containing one thread) Translation

Source
It was isolated from bovine pancreas.

Molecular Weight
38 kDa monomer

		Catalogue Number
DNase I (Lyophilized)	20 mg	MG-DNAZ-01-20
	100 mg	MG-DNAZ-01-100
	1gr	MG-DNAZ-01-1000

DNase I (Liquid) 20 mg/ml

DNase I (RNase-free) is an endonuclease that specifically cleaves DNA to release di-, tri- and oscillations. Oligonucleotide products with 5'-phosphorylated and 3'-hydroxylated tips. DNase I, single and double stranded DNA, chromatin and RNA: DNA hybrids.

Specifications
Recombinant enzyme

Apps
- DNA template degradation in transcription reactions
- Extraction of pollutant genomic DNA from RNA samples
- DNase I footprinting (in vitro protein-DNA binding analysis)
- Nick (containing one thread) Translation

Source
It was isolated from bovine pancreas.

Molecular Weight
38 kDa monomer

		Catalogue Number
DNase I (Liquid) 20 mg/ml	1 ml	MG-DNAZ-02-1
	5 ml	MG-DNAZ-02-5

Agarose

LE-Agarose 1200 is a low EEO, high gel strength agarose for analysis of nucleic acid molecules. Typical applications include electrophoretic separation of DNA and RNA, Southern & Northern blotting, as well as Immunodiffusion of proteins and the Ouchterlony method.

Analytical Features	
EEO (-m r)	0.1-0.15
Water content	10%
Sulfate (SO_4)	0.15-0.2%
Gel Strength (1% gel)	1200 g/cm_2
Gelling Temperature (1.5% gel)	33±1.5°C
Melting Temperature (1.5% gel)	87±1.5°C

		Catalogue Number
Agarose	100 gr	MG-AGR-01-100
	500 gr	MG-AGR-01-500

Spin Column

- Suitable for DNA / RNA extraction.
- Silica membrane based filter tubes.
- It is compatible with solutions of different brands.
- Widely used for high purification of DNA / RNA in many laboratories.
- Economical for large sample operations.

Apps

- Recovery of DNA from agarose gel
- Genomic DNA / RNA obtained
- Obtaining plasmid DNA

Technology	Silica-membrane
Sample type	<400 µl PCR reaction mixture
	<400 mg TAE/TBE agarose gel
	Genomic DNA / RNA
	Plasmid DNA <10 kbp
A60/280	1.8 – 1.9
Binding capacity	45-55 µg

		Catalogue Number
Spin Column	100 adet	MG-SPK-01-100
	500 adet	MG-SPK-01-500
	1000 adet	MG-SPK-01-1000

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