Hydra

Life Science Products Catalogue 2023

Our aim is to produce novel products, to add up novel and enhanced properties to the currently available molecular biology, genetics and biotechnology applications and to contribute advancing the state of the art to enable our customers to achieve their goals.

Mission

We provide scientists with high quality, pure, time saving and easy-to-use products and kits to help them make the world a healthier and cleaner place and to help the humanity to leave a peaceful world for the next generations.

We provide an innovative background for scientists to accelerate their research and to maintain the integrity of their results.

Vision

We are committed to being one of the leading companies in the field to supply our customers from Turkey as well as from other countries all around the world with the high-quality raw materials and with ecologic solutions.

We strive to be a company that is always at the cutting edge of the current knowledge and technology and that is always with the desire to collaborate with renowned scientists all over the world to make a difference.

CONTENT

NUCLEIC ACID PURIFICATION AND ANALYSIS

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.

Hydra 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 Hydra 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

		Cat. No.
Blood DNA Isolation kit	50 Reaction	HY-KDNA-50
	100 Reaction	HY-KDNA-100
	250 Reaction	HY-KDNA-250

Genomic DNA Isolation Kit from Tissue and Cell Culture

The Genomic DNA Isolation Kit from Hydra 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

		Cat. No.
Tissue and Cell Culture Genomic DNA Isolation Kit	50 Reaction	HY-DDNA-50
	100 Reaction	HY-DDNA-100
	250 Reaction	HY-DDNA-250

Genomic DNA Isolation Kit

The Hydra 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

		Cat. No.
Genomic DNA Isolation Kit	50 Reaction	HY-GDNA-50
	100 Reaction	HY-GDNA-100
	250 Reaction	HY-GDNA-250

DNA Isolation Kit from Buccal Swaps

DNA Isolation Kit from Hydra 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

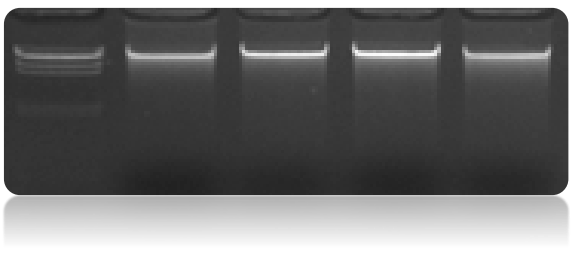
Easy to use; Rapid purification with column filtration system, easily homogenizing with the help of proteinase-K without requiring mechanical disintegration

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



		Cat. No.
DNA Isolation Kit from Buccal Swab	50 Reaction	HY-BDNA-50
	100 Reaction	HY-BDNA-100
	250 Reaction	HY-BDNA-250

Bone and Tooth DNA Isolation Kit

Hydra 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

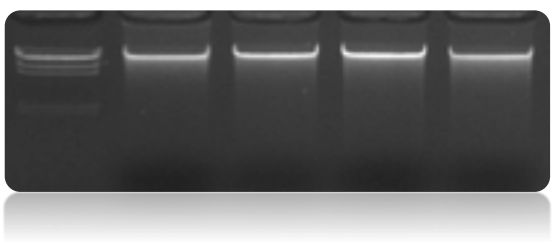
Easy to use; Rapid purification with filter system, easily tissue disintegration with the help of proteinase-K without requiring mechanical disintegration

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



		Cat. No.
DNA Isolation Kit fromBone and Tooth	50 Reaction	HY-DBTDNA-50
	100 Reaction	HY-DBTDNA-100
	250 Reaction	HY-DBTDNA-250

DNA Isolation Kit from Saliva

The Hydra 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

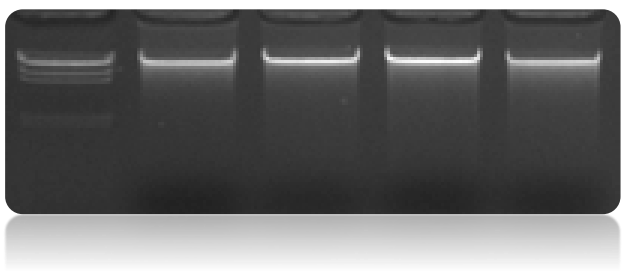
Easy to use; Rapid purification with filter system, easily tissue disintegration with the help of proteinase-K without requiring mechanical disintegration

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



		Cat. No.
DNA isolation Kit from Saliva	50 Reaction	HY-STDNA-50
	100 Reaction	HY-STDNA-100
	250 Reaction	HY-STDNA-250

Cell-free DNA Isolation Kit

It is based on the detection of fetal DNA (cfDNA) that circulates freely in the maternal blood. Hydra 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

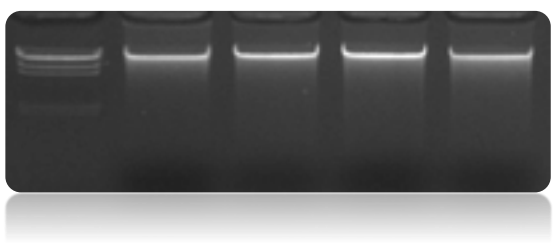
Security; No phenol / chloroform step

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



		Cat. No.
Cell free DNA Isolation Kit	50 Reaction	HY-CFDDNA-50
	100 Reaction	HY-CFDDNA-100
	250 Reaction	HY-CFDDNA-250

Urine DNA Isolation Kit

Hydra 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

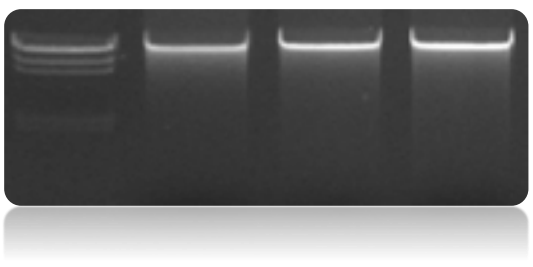
Easy to use; Rapid purification with column filtration system, easily homogenizing with the help of proteinase-K without requiring mechanical disintegration

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



		Cat. No.
Urine DNA Isolation Kit	50 Reaction	HY-UIDNA-50
	100 Reaction	HY-UIDNA-100
	250 Reaction	HY-UIDNA-250

Stool DNA Isolation Kit

The Hydra 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

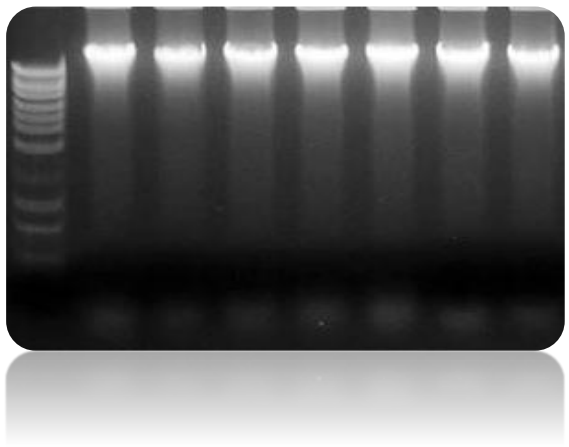
Easy to use; Rapid purification with the filter system, with the help of Proteinase-K, easy tissue disintegration without the need for mechanical disintegration

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



		Cat. No.
DNA Isolation Kit from Stool	50 Reaction	HY-STODNA-50
	100 Reaction	HY-STODNA-100
	250 Reaction	HY-STODNA-250

DNA Isolation Kit from Plant

Hydra 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

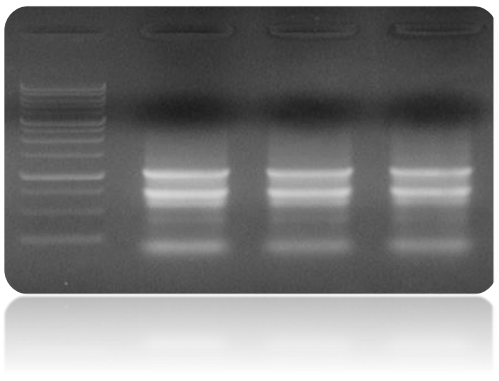
High Purity; PCR, enzyme cutting etc. suitable for applications

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



		Cat. No.
DNA Isolation Kit from Plant	50 Reaction	HY-PTDNA-50
	100 Reaction	HY-PTDNA-100
	250 Reaction	HY-PTDNA-250

Bacterial Genomic DNA Isolation Kit

Hydra 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

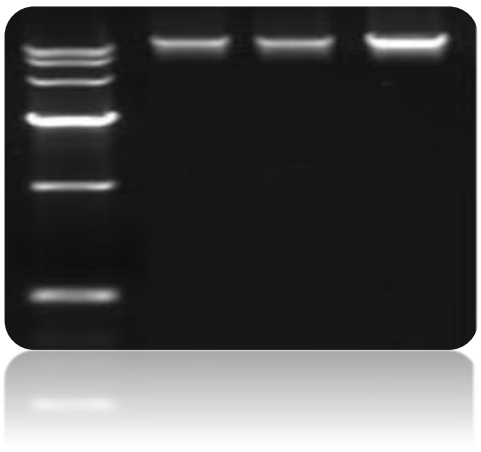
Easy to use; Rapid purification with column filtration system, easily homogenizing with the help of proteinase-K without requiring mechanical disintegration

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 molecular biology applications such as:

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



		Cat. No.
Bacterial Genomic DNAisolation kit	50 Reaction	HY-BAGDNA-50
	100 Reaction	HY-BAGDNA-100
	250 Reaction	HY-BAGDNA-250

Bacterial Plasmid DNA Isolation Kit

The Hydra 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

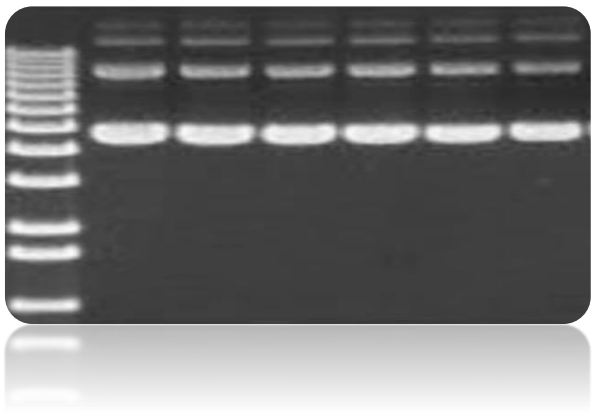
Fast; The whole procedure is only 30 minutes

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



		Cat. No.
Bacterial Plasmid DNA Isolation kit	50 Reaction	HY-BGPDNA-50
	100 Reaction	HY-BGPDNA-100
	250 Reaction	HY-BGPDNA-250

General RNA Isolation Kit

The Hydra General 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.

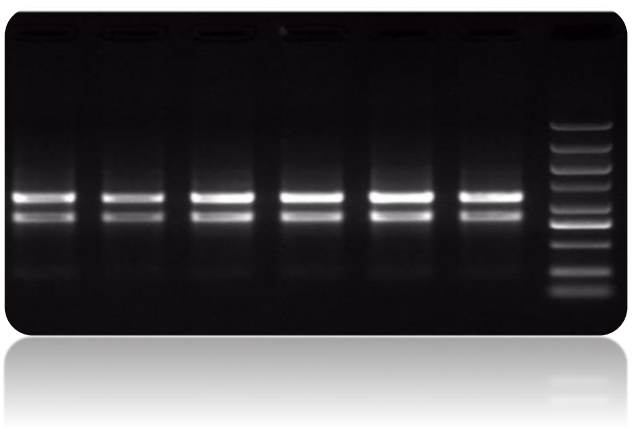
Properties

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



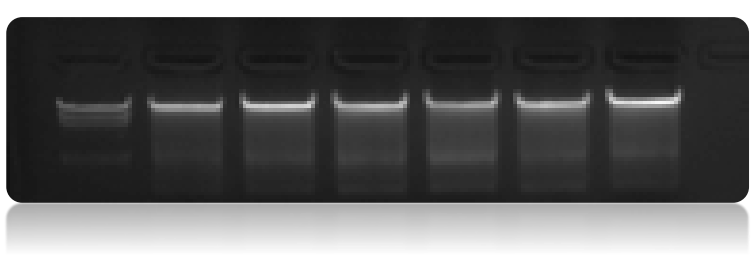
		Cat. No.
General RNA Isolation Kit	50 Reaction	HY-GRNA-50
	100 Reaction	HY-GRNA-100
	250 Reaction	HY-GRNA-250

Hydrazol (Trizol)

Hydrazol 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, Hydra trizol 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 Trizol method allows multiple samples to be processed simultaneously. The entire procedure can be completed within an hour. Total RNA isolated using Trizol 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



		Cat. No.
Hydrazol	100 mL	HY-HTRZ-01-100
	250 mL	HY-HTRZ-01-250

Gel Extraction Kit

The Hydra 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

		Cat. No.
Gel Extraction Kit	50 Reaction	HY-GELPCR-50
	100 Reaction	HY-GELPCR-100
	250 Reaction	HY-GELPCR-250

PCR and DNA Fragment Purification Kit

The Hydra 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 Hydra 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.

Properties

Speed; Quick procedure completed in 7 minutes

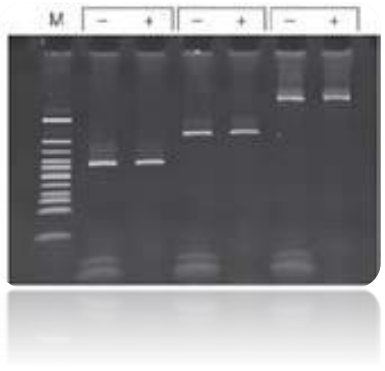
High efficiency; Up to 90% recovery of DNA fragments in the range of 50 bp - 10 kb

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



		Cat. No.
PCR and DNA FragmentPurification Kit	50 Reaction	HY-PCRDP-50
	100 Reaction	HY-PCRDP-100
	250 Reaction	HY-PCRDP-250

Gel and PCR Purification Kit

With Hydra 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

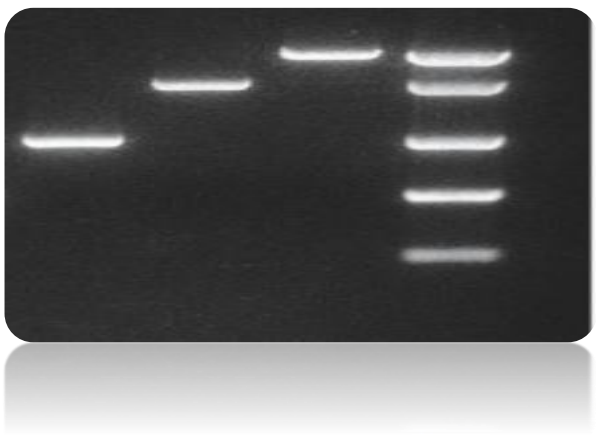
Practical; Capped filters combined with collecting tubes

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



		Cat. No.
Gel and PCR Purification Kit	50 Reaction	HY-GPP-50
	100 Reaction	HY-GPP-100
	250 Reaction	HY-GPP-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

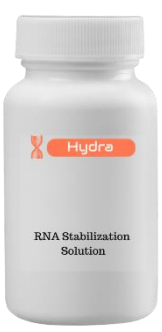
Simplifies sample collection; Immediately neutralizes RNases, stabilizing RNA in tissue or cells.

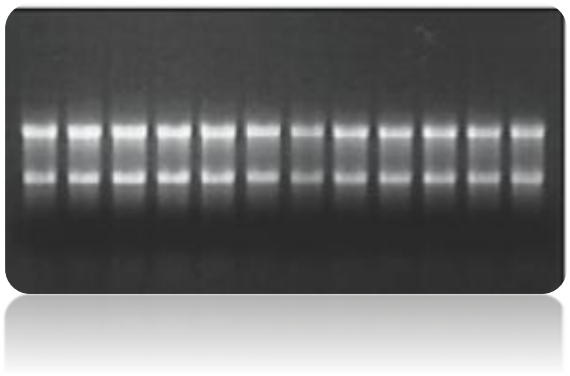
More flexibility; there is no need to freeze samples in liquid nitrogen or return samples to the laboratory freezer immediately.

- 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)





		Cat. No.
RNA Stabilization Solution	50 mL	HY-RST-50
	100 mL	HY-RST-100
	200 mL	HY-RST-200

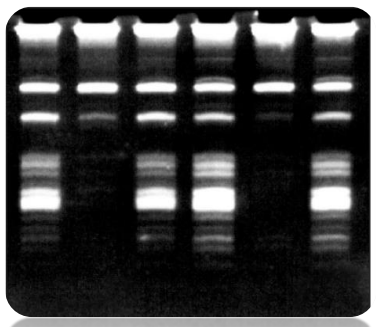
miRNA Extraction Kit

Hydra miRNA Isolation Kit provides a quick and easy spin column system for purifying and enriching micro RNAs (miRNAs) and other small cellular RNAs from a wide variety of tissue and cells. Since miRNAs are vital for regulating gene expression, this kit is optimized for isolation of small RNA molecules while removing larger RNAs and minimizing genomic DNA contamination for improved sensitive downstream applications.

Hydra miRNA Isolation Kit is improved for cell Small RNA extraction effectively from blood, cell and tissue samples to be a quick and useful method. Working principle of Kit depends on binding of RNA with its especially improved solutions to spin columns. The superior performance of the kit is due to its ability to lyse the cell walls of blood, cell and tissue samples, as well as its ability to remove PCR inhibitors present in the sample with solUtions specially improved for blood, cell and tissue samples. While wash buffer optimized specifically is improved for purified nucleic acids especially from protein and other inhibitors, the Lysis Buffer solution is improved for lysing the cell wall and remove the inhibitors from the sample. With the complete the isolation process, miRNA is obtained at high efficiency and purity.

Apps

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



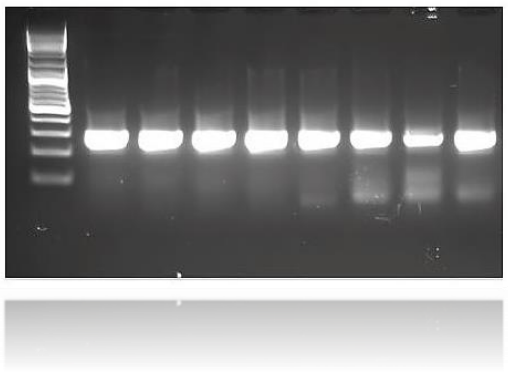
		Cat. No.
miRNA Extraction Kit	50 Reaction	HY-miRNA-50
	100 Reaction	HY-miRNA-100
	250 Reaction	HY-miRNA-250

Food DNA Extraction Kit

Hydra Food DNA Extraction Kit is improved for cell DNA extraction effectively from food samples (cereal, flour, soybean and soy milk, chocolate, chips, cereal dry, lecithin, oil, etc.) to be a quick and useful method. Working principle of Kit depends on binding of DNA with its especially improved solutions to spin columns. The superior performance of the kit is due to its ability to lyse the cell walls of further-processed food samples, as well as its ability to remove PCR inhibitors present in the sample with solutions specially improved for food samples. While wash buffer optimized specifically is improved for purified nucleic acids especially from protein and other inhibitors, the Lysis Buffer solution is improved for lysing the cell wall and remove the inhibitors from the sample. With the complete the isolation process, DNA is obtained at high efficiency and purity.

Apps

- Enzyme cutting applications
- PCR
- Labeling



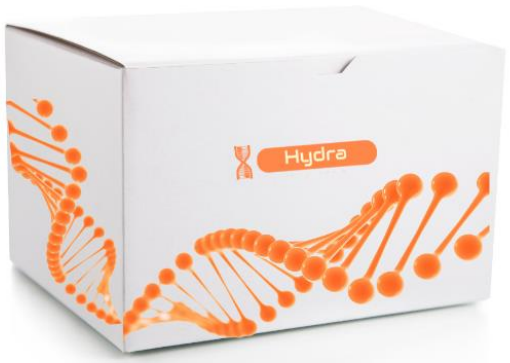
		Cat. No.
Food DNA Extraction Kit	50 Reaction	HY-FODNA-50
	100 Reaction	HY-FODNA-100
	250 Reaction	HY-FODNA-250

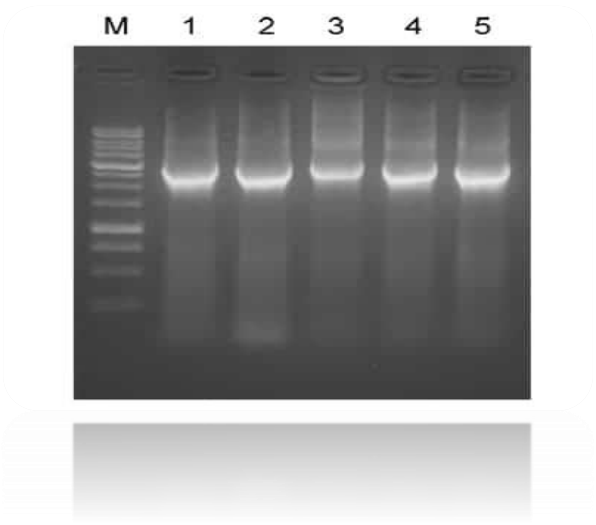
Viral NA Extraction Kit

Hydra Viral NA Isolation Kit provides a fast, simple and costeffective method for the isolation of viral DNA / RNA from cell-free samples such as serum, plasma, body fluids and supernatant of virusinfected cell cultures. The unique buffer system efficiently lysis cells and allows the nucleic acid to easily bind to the spin column filter. Pollutants such as salts, metabolites, soluble macromolecular and cellular components are removed in the wash step. Phenol extraction and ethanol precipitation are not required and high quality Nucleic Acid is eluted with RNase-free elution buffer. The whole procedure can be completed in 20 minutes.

Apps

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





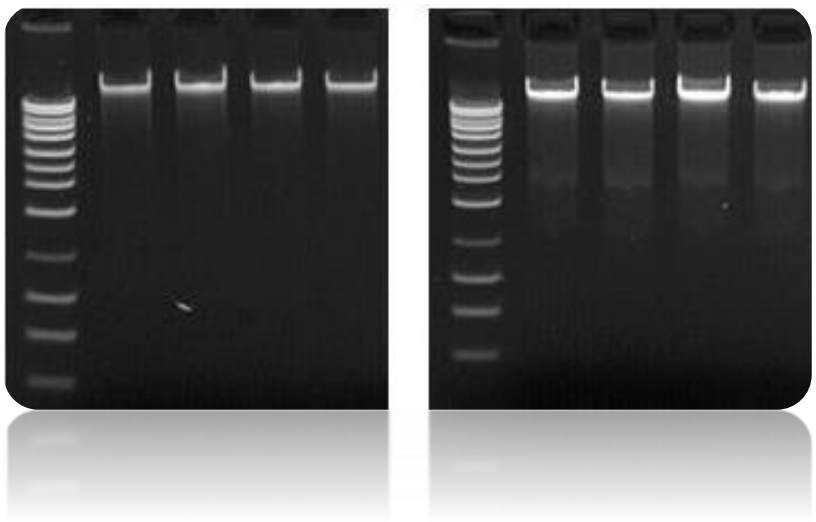
		Cat. No.
Viral NA Extraction Kit	50 Reaction	HY-VINA-50
	100 Reaction	HY-VINA-100
	250 Reaction	HY-VINA-250

DNA&RNA&Protein Extraction Kit

Hydra DNA&RNA&Protein Extraction Kit is improved for DNA&RNA&Protein extraction effectively from cell, tissue and blood samples to be a quick and useful method. Working principle of Kit depends on binding of DNA&RNA with its especially improved solutions to spin columns. The superior performance of the kit is due to its ability to lyse the cell walls of further-processed cell, tissue and blood samples, as well as its ability to remove PCR inhibitors present in the sample with solutions specially improved for cell, tissue and blood samples. While wash buffer optimized specifically is improved for purified nucleic acids especially from inhibitors, the Lysis Buffer solution is improved for lysing the cell wall and remove the inhibitors from the sample. With the complete the isolation process, DNA&RNA&Protein is obtained at high efficiency and purity.

Apps

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



		Cat. No.
DNA&RNA&Protein Extraction Kit	50 Reaction	HY-DRPE-50
	100 Reaction	HY-DRPE-100
	250 Reaction	HY-DRPE-250

Nucleic Acid Analysis

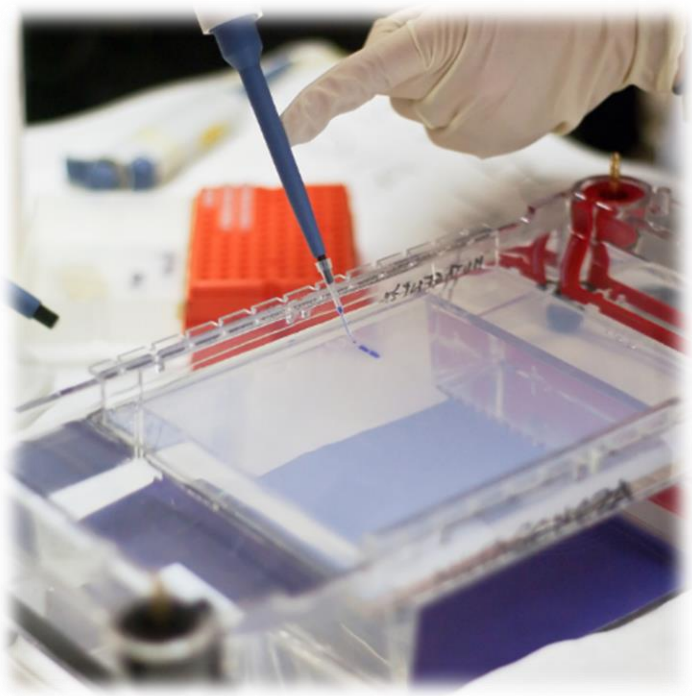
Nucleic Acid Analysis

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

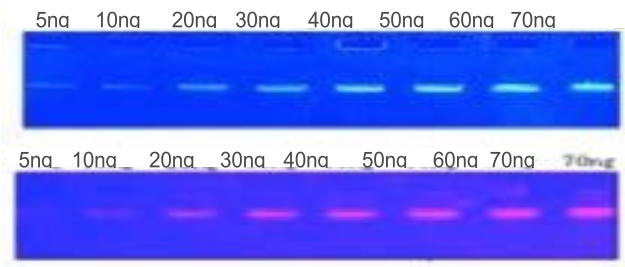
SYBR Safe Gel Dye is a new nucleic acid dye produced as an alternative to traditional ethidium bromide (EB) dyeing to display nucleic acids in agarose gel. This dye emits green fluorescent radiation when bound to DNA or RNA. SYBR Safe Gel dye stimulates a maximum of two fluorescents. When linked to nucleic 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)

		Cat. No.
SYBR Safe Gel Dye	500 µl	HY-SGDP-500
	1000 µl	HY-SGDP-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

Xylene Cyanol TAE: 4160bp TBE: 3030bp

Bromophenol Blue TAE: 370bp TBE: 220bp

6X Gel Paint, electrophoresis of tracking dyes

		Cat. No.
6X Gel Loading Paint, (Blue)	1 mL	HY-LDB-01
	5 X 1 mL	HY-LDB-05

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 Gel Paint, electrophoresis of tracking dyes

		Cat. No.
6X Gel Loading Paint, (Orange)	1 mL	HY-LDO-01
	5 X 1 mL	HY-LDO-05

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.

Xylene Cyanol TAE: 4160bp TBE: 3030bp

Bromophenol Blue TAE: 370bp TBE: 220bp

Orange G TAE/TBE: <50bp

6X Gel Paint, electrophoresis of tracking dyes

		Cat. No.
6X Gel Loading Paint, Trio (Green)	1 mL	HY-LDG-01
	5 X 1 mL	HY-LDG-05

Low Range DNA Ladder

The low ladder (marker) is ideal for determining double chain DNA sizes between 25 and 700 base pairs.

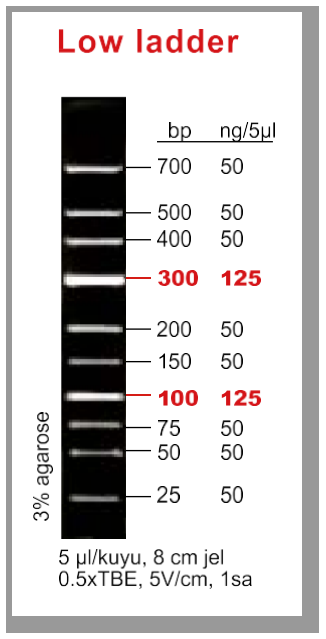
Ladder contains 10 linear, double chain fragments of different sizes.

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

		Cat. No.
Low Range DNA Ladder	50 µg	HY-LOWRD-50

20 bp DNA Ladder

The 20 bp DNA ladder (marker) is ideal for determining double chain DNA sizes between 60 and 300 base pairs.

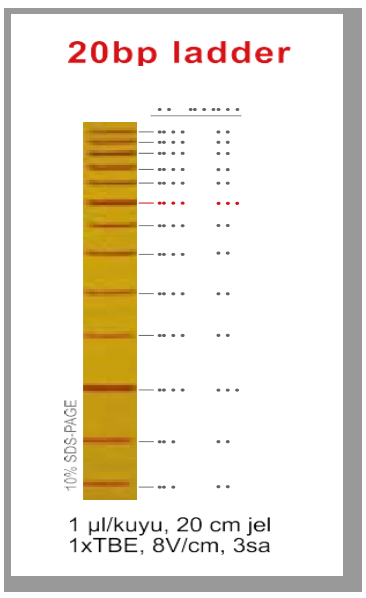
Ladder contains 13 linear, double chain fragments of different sizes.

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

		Cat. No.
20 bp DNA Ladder	50 µg	HY-DLDR-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.

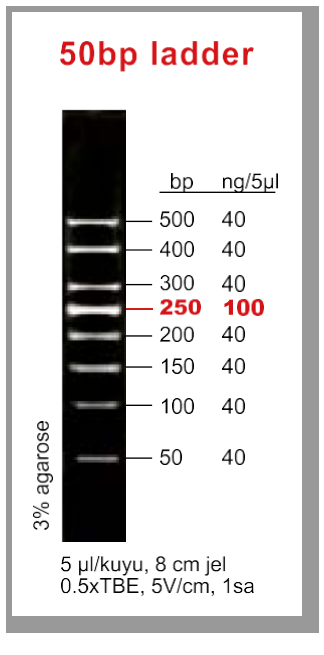
Ladder contains 8 linear, double chain fragments of different sizes.

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

		Cat. No.
50 bp DNA Ladder	1x50 µg	HY-DLDR-50-1
	5x50 µg	HY-DLDR-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.

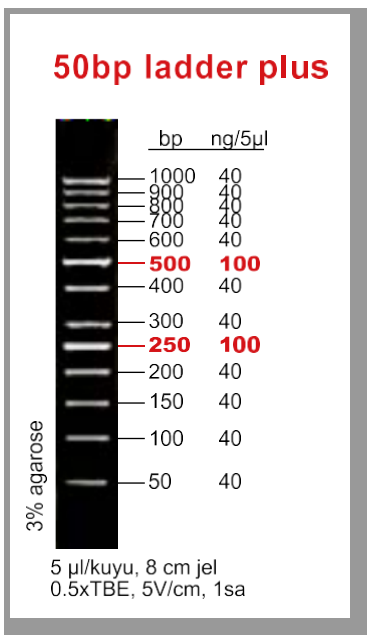
Ladder plus contains 13 linear double chain fragments of different sizes.

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

		Cat. No.
50 bp DNA Ladder Plus	1x50 µg	HY-DLDR-50P-1
	5x50 µg	HY-DLDR-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.

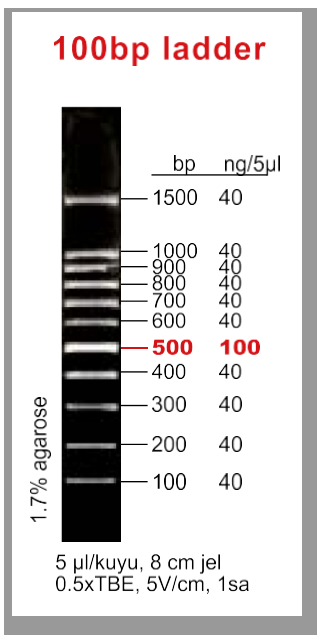
Ladder contains 11 linear, double chain fragments of different sizes.

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

		Cat. No.
100 bp DNA Ladder	1x50 µg	HY-DLDR-100-1
	5x50 µg	HY-DLDR-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.

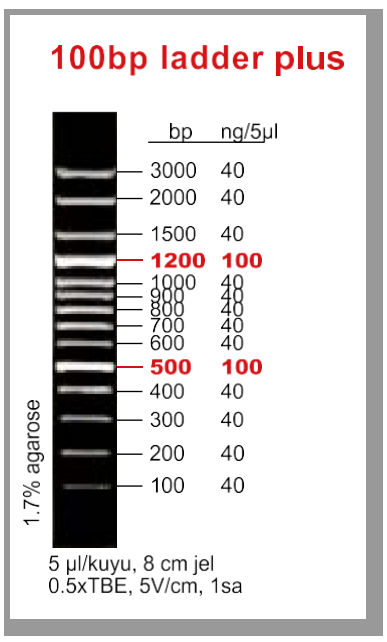
Ladder plus contains 14 linear double chain fragments of different sizes.

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

		Cat. No.
100 bp DNA Ladder Plus	1x50 µg	HY-DLDR-100P-1
	5x50 µg	HY-DLDR-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.

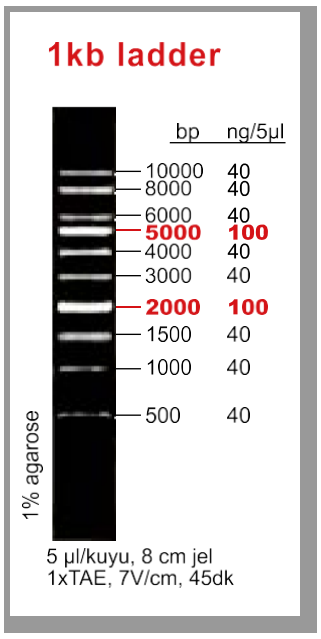
Ladder contains 10 linear double chain fragments of different sizes.

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

		Cat. No.
1 kb DNA Ladder	1x50 µg	HY-DLDR-1000-1
	5x50 µg	HY-DLDR-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.

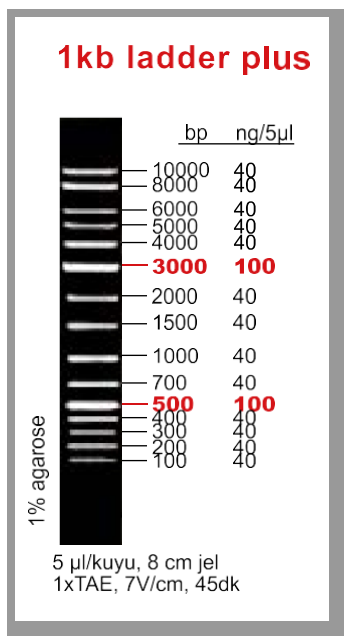
Ladder Plus contains 15 linear double chain fragments of different sizes.

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

		Cat. No.
1 kb DNA Ladder Plus	1x50 µg	HY-DLDR-1000P-1
	5x50 µg	HY-DLDR-1000P-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

		Cat. No.
50X TAE Buffer	500 mL	HY-TAEX-500
	1000 mL	HY-TAEX-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

		Cat. No.
10X TBE Buffer	500 mL	HY-TBEX-500
	1000 mL	HY-TBEX-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 Hydra 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

Hydra 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.

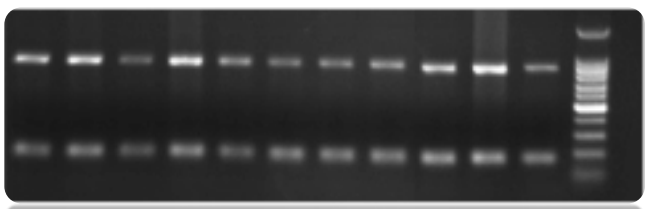
Specifications

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



		Cat. No.
2X Taq Master Mix	25 µl 80 Reax.	HY-TAQMIX-80
	25 µl 400 Reax.	HY-TAQMIX-400

2X TaqMan Master Mix

Hydra 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.

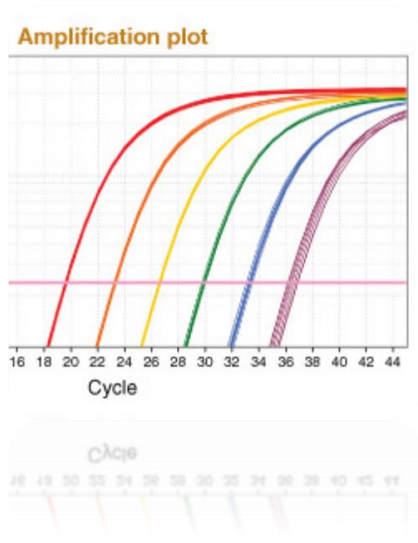
Specifications

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



		Cat. No.
2X TaqMan Master Mix	25 µl 80 Reax.	HY-TAQMAN-80
	25 µl 400 Reax.	HY-TAQMAN-400

2X LongTaq Master Mix

Hydra 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

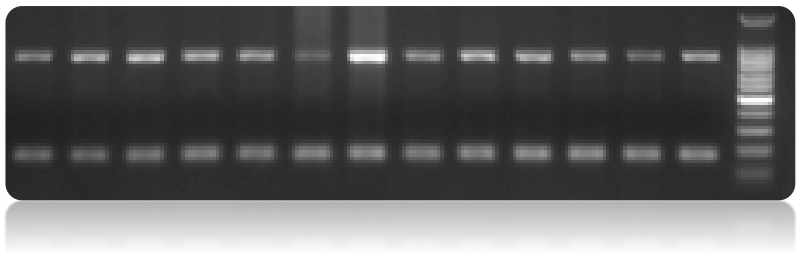
Longer fragments; Amplifies long stencil DNA up to 40 kb

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



		Cat. No.
2X LongTaq Master Mix	25 µl 80 Reax.	HY-LTAQMIX-80
	25 µl 400 Reax.	HY-LTAQMIX-400

2X B Master Mix

Hydra 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.

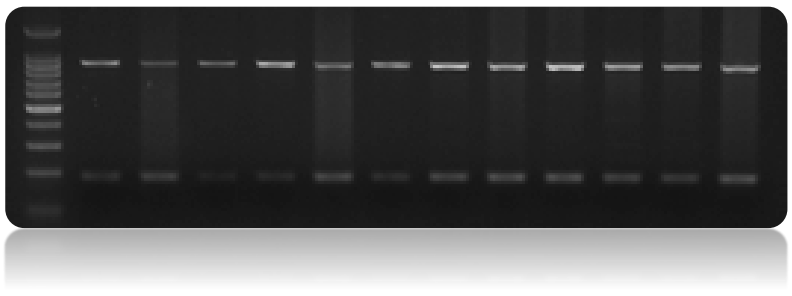
Specifications

Ease of Use; Provides minimal optimization with only primer and template DNA insertion to be ready for PCR 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



		Cat. No.
2X B Master Mix	25 µl 80 Reax.	HY-BMIX-80
	25 µl 400 Reax.	HY-BMIX-400

2X GC Master Mix

Hydra 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

		Cat. No.
2X GC Master Mix	25 µl 80 Reax.	HY-GCMIX-80
	25 µl 400 Reax.	HY-GCMIX-400

2X Hot Start Taq Master Mix

Hydra 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.

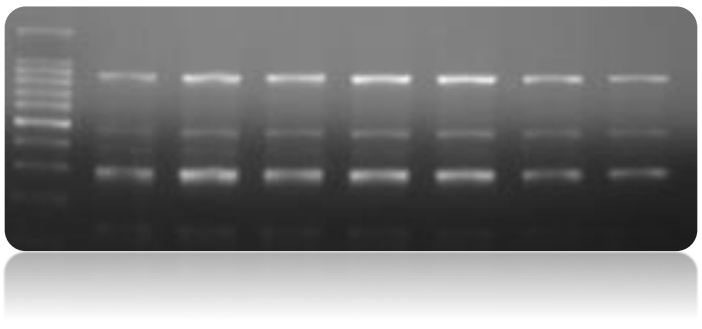
Specifications

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



		Cat. No.
2X Hot Start Taq Master Mix	25 µl 80 Reax.	HY-HSTAQMIX-80
	25 µl 400 Reax.	HY-HSTAQMIX-400

Hot Start Taq DNA Polymerase

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

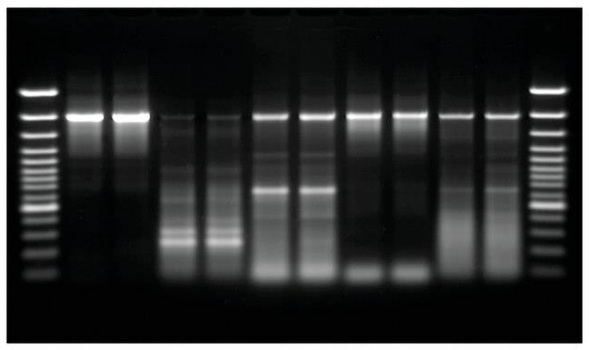
Hot Start Buffer (Mg+2 plus) 1.25 ml

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

		Cat. No.
Hot Start Taq DNA Polymerase	250 U	HY-HTSTAQ-250

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.

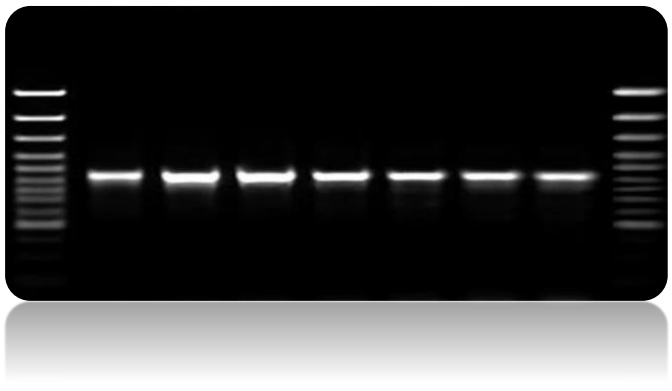
Content

Taq DNA Polymerase 100 µl

10xPCR Buffer KCl 1.25 ml

10xPCR Buffer NH_2SO_4 1.25 ml

25 mM MgCl2 1.25 ml



Apps

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

Taq DNA Polymerase	500 U	HY-HYTAQ-500

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

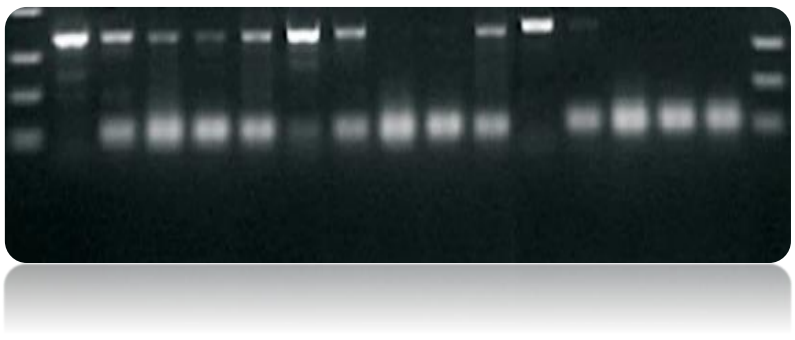
LongTaq DNA Polymerase	50 µl
10xPCR Buffer I (KCl)	1.25 ml
10xPCR Buffer II (KCl ve NH2SO4)	1.25 ml
PCR Booster (Enhancer)	500 µl

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



		Cat. No.
LongTaq DNA Polymerase	250 U	HY-HYLTAQ-250

Pfu DNA Polymerase

Concentration: 5U/µl

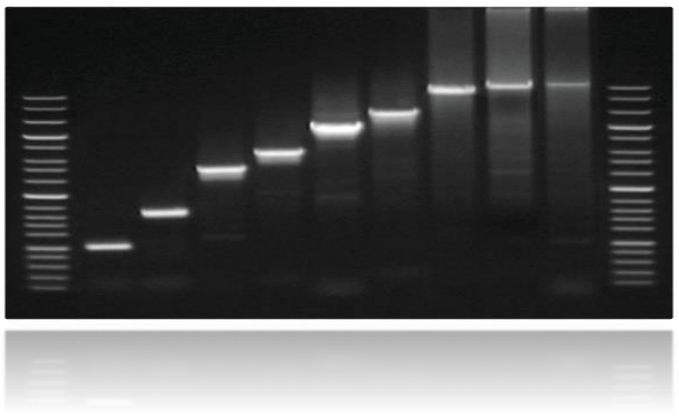
Pfu DNA Polymerase is a recombinant DNA Polymerase enzyme, which has a much higher proofreading property and thermal stability than other DNA polymerases obtained from Pyrococcus furiosus organism, which is a hyperthermophilic archaea and has a molecular weight of 90 kDa. It is suitable for amplification 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 MgCl2	2x1.25 ml

App

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



		Cat. No.
PFU DNA Polymerase	500 U	HY-HYFTAQ-500

2,5 mM dNTP Mix

Hydra 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.

		Cat. No.
2,5 mM dNTP Mix	1 mL	HY-DNTPMX-1
	5x1 mL	HY-DNTPMX-5

10 mM dNTP Mix

Hydra 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.

		Cat. No.
10 mM dNTP Mix	1 mL	HY-DNTPMX-10-1
	5x1 mL	HY-DNTPMX-10-5

100 mM dNTP Set

The Hydra 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.

		Cat. No.
100 mM dNTP Set	4x0,25 mL	HY-DNTPS100-01

25 mM MgCl2

25 mM MgCl2 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.

25 mM $MgCl_2$	1 mL	HY-HMGCL-1
	5x1 mL	HY-HMGCL-5

2X SYBR Green qPCR Mix

Hydra 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.

Hydra2X 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

		Cat. No.
2X SYBR Green qPCR Mix	25 µl 80 Reax.	HY-HSYBR-80
	25 µl 400 Reax.	HY-HSYBR-400

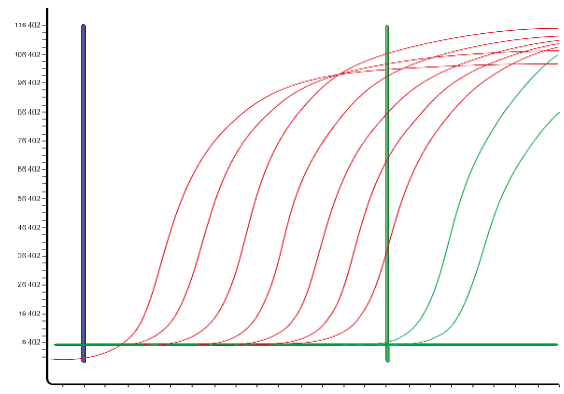
2X SYBR Green qPCR Mix (Rox+)

Hydra 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.

Hydra 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

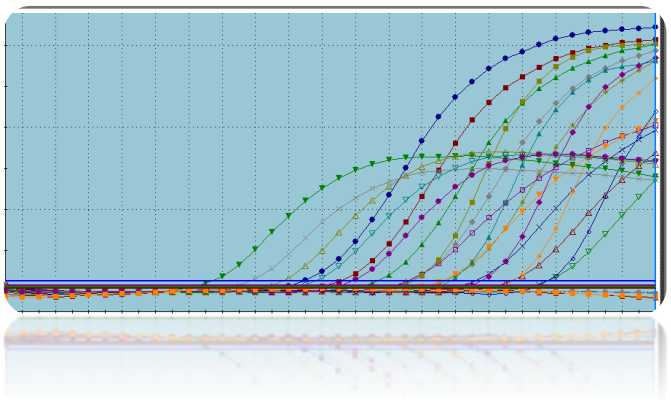
- Gene expression analysis
- DNA / RNA target detection
- Number of copies variation analysis

		Cat. No.
2X SYBR Green qPCR Mix (Rox+)	25 µl 80 Reax.	HY-HSYBR-ROX-80
	25 µl 400 Reax.	HY-HSYBR-ROX-400

2X qPCR Probe Master Mix

It allows you to make the best hotstart PCR applications with taq polymerase combined with an chemical modification. The special additives in its content help to eliminate foaming of the mixture resulting from vortexing, so that valuable samples are retained with fewer errors. Specially developed buffer chemistry works in harmony with almost all of your reaction designs. Hydra 2X qPCR Probe Master Mix reagents contain an inhibitor neutralizing additive that inhibits several types of PCR inhibition from clinical, plant, or environmental samples or complex food matrices, providing reliable qPCR assay performance. So you can do all the environmental analysis, GMO (genetically modified organism) analysis, analysis for clinical samples (stool including). In addition, Hydra 2X qPCR Probe Master Mix reagents are optimized for use in single-step RNA analyzes and different RNA analyzes.

- Extreme thermal stability: withstands three months at 25 ºC with no impact on efficiency
- Chemical based hot start system reduces non-specific amplification and primer dimers
- Overcomes inhibition in crude extracts and environmental samples
- Amplifies up to 4 kb from genomic DNA, and GC-rich targets with up to 70% GC-content
- License-free for commercial or diagnostic use

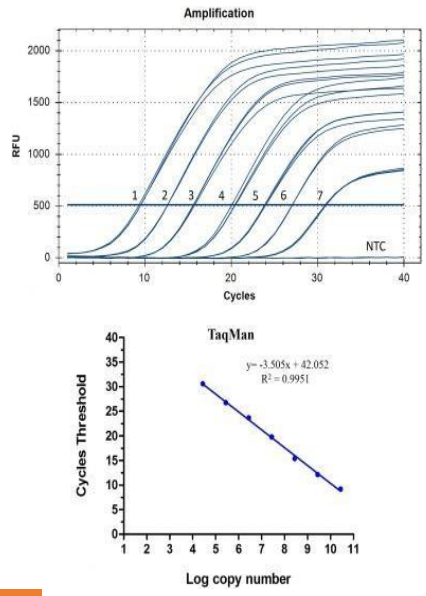


		Cat. No.
2X qPCR Probe Master Mix	25 µl 80 Reax.	HY-QPCR-PMIX-80
	25 µl 400 Reax.	HY-QPCR-PMIX-400

2X One Step RT-qPCR Probe Master Mix

Hydra 2X One Step RT-qPCR Probe Master Mix is a prepared, ready-to-use, high-precision 2X reaction mixture for one-step reverse transcription qualitative or quantitative PCR (RT-qPCR) of RNA templates using TaqMan® 5 'hydrolysis probes such as hydrolysis or hybridization probe detection chemicals. Single-stranded cDNA synthesis and PCR amplification are performed in the same tube without transfer between procedures.

It is ideal for highly efficient gene expression studies as well as for highly accurate measurement of RNA viruses or RNA targets in low copy number. The system is optimized for maximum RT-PCR efficiency, sensitivity and specificity in reduced reaction volumes and fast cycle times. The use of higher temperatures (50 to 55 ° C) for the first strand stage of the single strand RT-qPCR provides higher specificity for primary annealing and the degradation of RNA secondary structure capable of inhibiting cDNA synthesis. Hydra 2X One Step RT-qPCR Probe Master Mix is highly resistant to PCR inhibitors. Mixture also contains a reverse transcriptase enzyme at high purity and activity. The most basic component of the mixture is an ultra pure, durable, mutant thermostable DNA polymerase coupled with chemical modification. This allows for a highly stable, high temperature starter reaction that minimizes the potential for primer dimer and other non-specific PCR events.

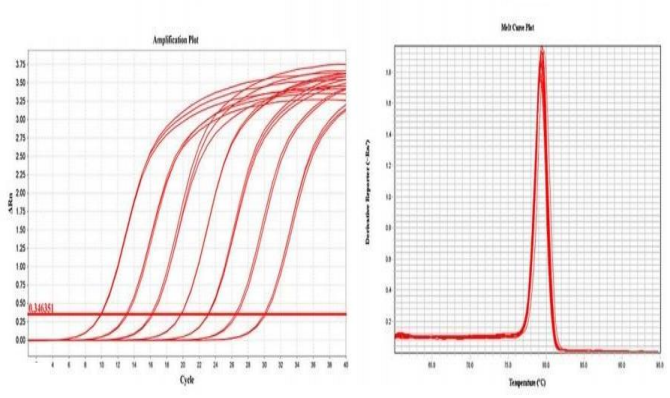


		Cat. No.
2X One Step RT-qPCR Probe Master Mix	25 µl 80 Reax.	HY-ONES-PMIX-80
	25 µl 400 Reax.	HY-ONES-PMIX-400

2X One Step RT-qPCR Sybr Green Master Mix

Hydra 2X One Step RT-qPCR Sybr Green Master Mix is a prepared, ready-to-use, high-precision 2X reaction mixture for one-step reverse transcription qualitative or quantitative PCR (RT-qPCR) of RNA templates using Sybr Green dye such as detection chemicals. Single-stranded cDNA synthesis and PCR amplification are performed in the same tube without transfer between procedures.

It is ideal for highly efficient gene expression studies as well as for highly accurate measurement of RNA viruses or RNA targets in low copy number. The system is optimized for maximum RT-PCR efficiency, sensitivity and specificity in reduced reaction volumes and fast cycle times. The use of higher temperatures (50 to 55 ° C) for the first strand stage of the single strand RT-qPCR provides higher specificity for primary annealing and the degradation of RNA secondary structure capable of inhibiting cDNA synthesis. Hydra 2X One Step RT-qPCR Sybr Green Master Mix is highly resistant to PCR inhibitors. Mixture also contains a reverse transcriptase enzyme at high purity and activity. The most basic component of the mixture is an ultra pure, durable, mutant thermostable DNA polymerase coupled with chemical modification. This allows for a highly stable, high temperature starter reaction that minimizes the potential for primer dimer and other non-specific PCR events.



		Cat. No.
2X One Step RT-qPCR Sybr Green Master Mix	25 µl 80 Reax.	HY-ONES-SYBR-80
	25 µl 400 Reax.	HY-ONES-SYBR-400

cDNA Synthesis Kit

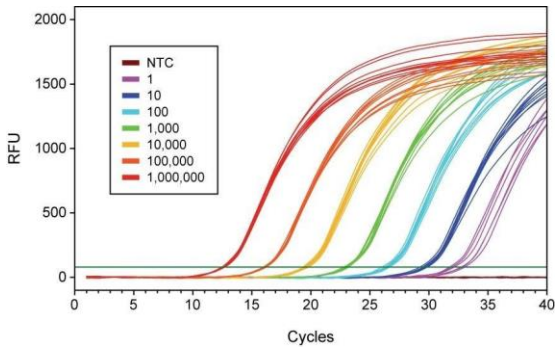
Hydra cDNA Synthesis Kit provides a rapid and sensitive method for first-strand cDNA synthesis, which displays excellent linearity across a wide range of starting material. This gives the same relative representation in cDNA templates, regardless of gene abundance, making it excellent for use in qPCR studies.

Hydra cDNA Synthesis Kit contains a highly-pure reverse transcriptase and optimized buffer system, which includes a unique blend of random hexamers and anchored oligo (dT) primers to deliver the highest quality qPCR ready cDNA. This makes the Hydra cDNA Synthesis Kit ideal for working with limited sample volumes, such as micro dissected samples and tissue biopsies (down to 1 pg of input RNA), to reverse transcribe precious RNA into stable cDNA ready for accurate real-time quantification. The unique blend of random hexamer primers and anchored oligo dT in the Buffer also ensure unbiased 3' and 5' coverage and reverse transcription of all regions. Hydra cDNA Synthesis Kit can be used with Probe and SYBR® Kits for real-time RT-qPCR without compromising on quality, giving real-time results.

- Efficient – high-target affinity, coupled with a buffer system for improved yield of full-length cDNA
- Unbiased – optimized mix of random hexamers and anchored oligo dT primers for complete 5' to 3' RNA sequence representation
- Sensitive – lower Ct values from a broad range of input cDNA concentrations, enabling accurate detection of very low-copy targets
- Robust – reliable reverse transcription under challenging conditions, including complex templates and in the presence of inhibitors

Applications

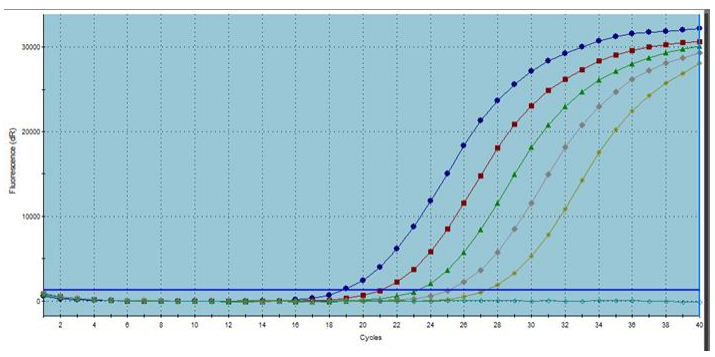
- Gene expression analysis
- Tissue biopsy analysis
- RNA target detection
- Pathogen detection



		Cat. No.
cDNA Synthesis Kit	50 Reax.	HY-CDNA-50
	100 Reax.	HY-CDNA-100
	200 Reax.	HY-CDNA-200

miRNA to cDNA Synthesis Kit

Hydra miRNA to cDNA Synthesis Kit with Poly(A) Polymerase Tailing, is a complete system for the efficient synthesis of first strand miRNA from total RNA templates. This comprehensive kit contains all the miRNA synthesis required reagents including Poly(A) Polymerase and Hydra Reverse Transcriptase. Poly(A) Polymerase catalyses the template independent addition of adenosine residues onto the 3' ends of polyribonucleotides. All non-coding RNAs and smaller RNAs such as miRNAs can become reverse- transcriptable, via the use of oligo d(T), after being poly(A)-tailed. Originated from bacteria, Hydra Poly(A) Polymerase has been shown to be more effective than Poly(A) Polymerase from E. coli at oligonucleotide-labeling and poly(A) tailing of long RNA templates.



		Cat. No.
miRNA to cDNA Synthesis Kit	50 Reax.	HY-miRna-CDNA-50
	100 Reax.	HY-miRna-CDNA-100
	200 Reax.	HY-miRna-CDNA-200

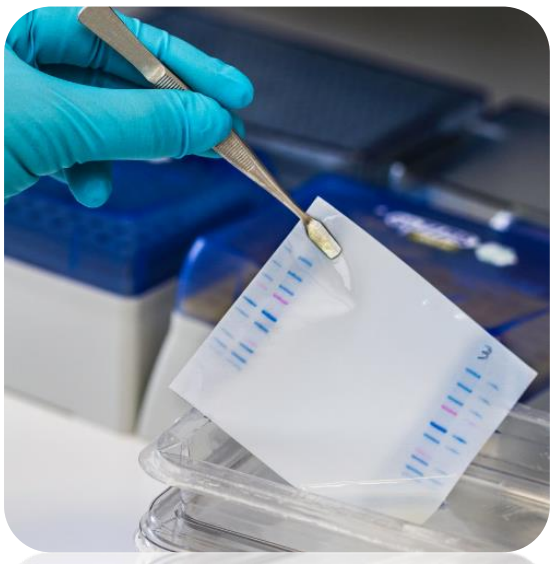
WESTERN BLOT ANALYSIS AND CELL CULTURE REAGENTS

WESTERN BLOT ANALYSİS AND CELL CULTURE REAGENTS

The first step in a western blotting procedure is to separate the macromolecules in a sample using gel electrophoresis. Subsequently, the separated molecules are transferred or blotted onto a second matrix, generally a nitrocellulose or polyvinylidene difluoride (PVDF) membrane. Next, the membrane is blocked to prevent any nonspecific binding of antibodies to the surface of the membrane. Most commonly, the transferred protein is then probed with a combination of antibodies: one antibody specific to the protein of interest (primary antibody) and another antibody specific to the host species of the primary antibody (secondary antibody). Often the secondary antibody is complexed with an enzyme, which when combined with an appropriate substrate, will produce a detectable signal. Chromogenic substrates produce a precipitate on the membrane resulting in colorimetric changes visible to the eye. The most sensitive detection methods use a chemiluminescent substrate that produces light as a byproduct of the reaction with the enzyme conjugated to the antibody. The light output can be captured using film. However, digital imaging instruments based on charge-coupled device (CCD) cameras are becoming popular alternatives to film for capturing chemiluminescent signal. Alternatively, fluorescently tagged antibodies can be used, which require detection using an instrument capable of capturing the fluorescent signal. Fluorescent blotting is a newer technique and is growing in popularity as it affords the potential to multiplex (detect multiple proteins on a single blot). Whatever system is used, the intensity of the signal should correlate with the abundance of the antigen on the membrane.

Cell culture refers to the removal of cells from an animal or plant and their subsequent growth in a favorable artificial environment. The cells may be removed from the tissue directly and disaggregated by enzymatic or mechanical means before cultivation, or they may be derived from a cell line or cell strain that has already been established. Primary culture Primary culture refers to the stage of the culture after the cells are isolated from the tissue and proliferated under the appropriate conditions until they occupy all of the available substrate (i.e., reach confluence). At this stage, the cells have to be subcultured (i.e., passaged) by transferring them to a new vessel with fresh growth medium to provide more room for continued growth. Cell line After the first subculture, the primary culture becomes known as a cell line. Cell lines derived from primary cultures have a limited life span (i.e., they are finite; see below), and as they are passaged, cells with the highest growth capacity predominate, resulting in a degree of genotypic and phenotypic uniformity in the population. Cell strain If a subpopulation of a cell line is positively selected from the culture by cloning or some other method, this cell line becomes a cell strain. A cell strain often acquires additional genetic changes subsequent to the initiation of the parent line.

As Hydra Biotechnology, we have developed and produced western blot and cell culture products to accelerate western blot and cell culture studies in the laboratory environment.



RIPA Lysis Buffer

Hydra RIPA Lysis Buffer is formulated for efficient and complete cell lysis and solubilization of proteins. Hydra RIPA Lysis Buffer enables protein extraction from cytoplasmic, membrane and nuclear proteins and is compatible with several applications, including reporter assays, protein assays, immunoassays and protein purification.

Features: Suitable for protein extraction from a wide variety of cells and tissues.

- Versatile: enables extraction of cytoplasmic, membrane and nuclear proteins.
- Compatible with a wide range of individual protease inhibitors and cocktails.

		Cat. No.
RIPA Lysis Buffer	100 ml	HY-RIPA-100

10x RIPA Lysis Buffer

Hydra 10x RIPA Lysis Buffer is formulated for efficient and complete cell lysis and solubilization of proteins. Hydra 10x RIPA Lysis Buffer enables protein extraction from cytoplasmic, membrane and nuclear proteins and is compatible with several applications including western blotting and immunoprecipitation.

Features: Suitable for protein extraction from a wide variety of cells and tissues.

- Versatile: enables extraction of cytoplasmic, membrane and nuclear proteins.
- Compatible with a wide range of individual protease inhibitors and cocktails

		Cat. No.
10x RIPA Lysis Buffer	100 ml	HY-RIPA-10-100

Acrylamide/Bisacrylamide

Hydra Acrylamide/Bisacrylamide, 29:1 %30 Ready-to-use Solution is prepared using molecular biology grade acrylamide and bisacrylamide in ultrapure water. Hydra Acrylamide/Bisacrylamide, 29:1 %30 Ready-to-use Solution is 0.22 µm filter sterilized and suitable for electrophoresis of both proteins and nucleic acids. It can be used for preparation of stacking and resolving gels during sodium dodecyl sulfate polyacrylamide gel electrophoresis.

Hydra Acrylamide/Bisacrylamide, 19:1 %40 Ready-to-use Solution is prepared using molecular biology grade acrylamide and bisacrylamide in ultrapure water. Hydra Acrylamide/Bisacrylamide, 19:1 %40 Ready-to-use Solution is 0.22 µm filter sterilized and suitable for electrophoresis of both proteins and nucleic acids. It can be used for preparation of stacking and resolving gels during sodium dodecyl sulfate polyacrylamide gel electrophoresis.

Hydra Acrylamide/Bisacrylamide, 37.5:1 %30 Ready-to-use Solution is prepared using molecular biology grade acrylamide and bisacrylamide in ultrapure water. Hydra Acrylamide/Bisacrylamide, 37.5:1 %30 Ready-to-use Solution is 0.22 µm filter sterilized and suitable for electrophoresis of both proteins and nucleic acids. It can be used for preparation of stacking and resolving gels during sodium dodecyl sulfate polyacrylamide gel electrophoresis.

		Cat. No.
Acrylamide/Bisacrylamide, 29:1 %30	100 ml	HY-AB-29-100
Acrylamide/Bisacrylamide, 19:1 %40	100 ml	HY-AB-19-100
Acrylamide/Bisacrylamide,37.5:1 %30	100 ml	HY-AB-37-100

Laemmli Sample Buffer (2x)

Hydra Laemmli Sample Buffer 2x is a premixed buffer for protein sample preparation prior to loading on SDS- PAGE. It is supplied as 2x concentrate. 50 µl B-mercaptoethanol should be added per 950 µl Hydra Laemmli Sample Buffer 2x prior to use.

Features: Pre-mixed buffer for protein sample preparation.

		Cat. No.
Laemmli Sample Buffer (2x)	15 ml	HY-LSB-2-15

Laemmli Sample Buffer (4x)

Laemmli Sample Buffer 4x is a premixed buffer for protein sample preparation prior to loading on SDS- PAGE. It is supplied as 4x concentrate. 100 µl B-mercaptoethanol should be added per 900 µl Hydra Laemmli Sample Buffer 4x prior to use.

Features: Pre-mixed buffer for protein sample preparation.

		Cat. No.
Laemmli Sample Buffer (4x)	10 ml	HY-LSB-4-10

Laemmli Sample Buffer (10x)

Hydra Laemmli Sample Buffer 10x is a premixed buffer for protein sample preparation prior to loading on SDS-PAGE. It is supplied as 10x concentrate. 20 µl β-mercaptoethanol should be added per 80 µl Hydra Laemmli Sample Buffer 10x prior to use.

Features: Pre-mixed buffer for protein sample preparation.

Denser bands: It allows for thicker bands especially when working with small number of cells, lysates with low concentration, and proteins with low expression.

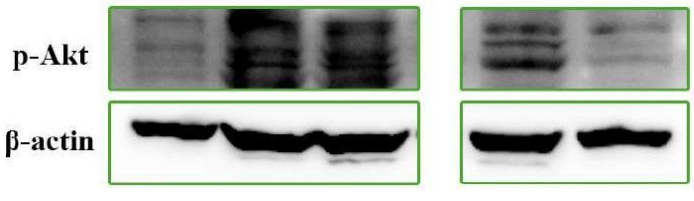
		Cat. No.
Laemmli Sample Buffer (10x)	2 ml	HY-LSB-10-2

Lyse & Load

Hydra Lyse&Load is a premixed buffer, which combines RIPA Lysis Buffer and Laemmli Sample Buffer in one solution for protein sample preparation prior to loading on SDS-PAGE. 25 µl B- mercaptoethanol should be added per 1 ml Hydra Lyse&Load prior to use.

Features: High quality western blotting solution.

Denser bands: It allows for thicker bands especially when working with small number of cells, lysates with low concentration, and proteins with low expression.



		Cat. No.
Lyse & Load	5 ml	HY-LD-5

Nitrocellulose Membrane

Hydra Nitrocellulose Membrane is dense 100% nitrocellulose combining the advantages of high protein binding capacity with low background and high membrane stability, which ensures easy handling and excellent signal-to- noise results.

Hydra Nitrocellulose Membrane has excellent binding properties for western blotting, dot-blot assays, and other protein or nucleic acid methods. They are used for a wide range of molecular weight proteins and nucleic acids >300 bp.

		Cat. No.
Nitrocellulose Membrane 30cm x 3m	0.22 µm	HY-NM-30-22
Nitrocellulose Membrane 30cm x 3m	0.45 µm	HY-NM-30-45

PVDF Membrane

Hydra Polyvinylidene Fluoride (PVDF) membranes display good mechanical strength, strong protein retention, low background, extensive solvent compatibility, and excellent coloring ability. Exceptional strength, high binding capacity and chemical compatibility of Hydra PVDF membrane make it ideal for use in Western blots, immunoblotting, and solid phase assays and plaque lifts.

Hydra PVDF membranes are highly hydrophobic and must be pre-wetted with methanol prior to submersion in transfer buffer. It has exceptional tensile strength, preventing it from cracking, tearing, breaking or curling.

		Cat. No.
PVDF Membrane 30cm x 3m	0.22 µm	HY-PVDF-22
PVDF Membrane 30cm x 3m	0.45 µm	HY-PVDF-45

ECL Western Blotting

Hydra ECL Western Blotting Substrate is specifically formulated for highly sensitive, non-radioactive, enhanced luminol-based chemiluminescent substrate for easy detection of horseradish peroxidase (HRP) on immunoblots. Hydra ECL Western Blotting Substrate offers excellent signal to noise ratio and clear background.

		Cat. No.
ECL Western Blotting	50 ml	HY-ECL-50
ECL Western Blotting	100 ml	HY-ECL-100
ECL Western Blotting	250 ml	HY-ECL-250

Re-Blot Stripping Solution

Hydra Re-Blot Stripping Solution is a uniquely formulated, ready-to-use reagent prepared for safely and effectively removing primary and secondary antibodies from nitrocellulose and PVDF membranes to allow use the same membrane for different antibodies. It helps scientists save their time and budgets without damaging the target antigen during stripping.

		Cat. No.
Re-Blot Stripping Solution	250 ml	HY-RBS-250
Re-Blot Stripping Solution	500 ml	HY-RBS-500

Ponceau S

Hydra Ponceau S is a Ready-to- use solution for the rapid (5 min) and reversible detection of protein bands on nitrocellulose, PVDF, cellulose acetate and membranes. Hydra Ponceau S rapidly stains proteins on membranes pink or light red.

This staining solution is generally used to confirm protein transfer in Western blotting applications before probing with select antibodies.

Hydra Ponceau S does not have a deleterious effect on the blotted polypeptides and can be completely removed from the membranes by repeated wash.

		Cat. No.
Ponceau S	500 ml	HY-POS-500
	1000 ml	HY-POS-1000

Bradford Reagent

Hydra Bradford Reagent is formulated for a ready-to-use total protein analysis reagent used for quick measurement of total protein concentration. Hydra Bradford Reagent contains Coomassie Brilliant Blue G-250, which associates with basic and aromatic amino acids, thus leading to a shift in absorbance during protein determination.

Hydra Bradford Reagent offer an easy-to-use assay in either test tube or microplate format: mix protein sample with the assay reagent, incubate shortly and measure the absorbance at 595nm. Color response with Coomassie is non-linear with increasing protein concentration, therefore, a standard curve must be created with each assay

		Cat. No.
Bradford Reagent	500 ml	HY-BR-500
	1000 ml	HY-BR-1000

10% SDS

Hydra 10% SDS (10% w/v) is sodium dodecyl sulfate prepared in 18 MΩ water. SDS is a detergent that is used for denaturation of proteins especially in polyacrylamide gel electrophoresis applications.

		Cat. No.
10% SDS	100 ml	HY-SDS-10-100
	500 ml	HY-SDS-10-500

20% SDS

Hydra 20% SDS (20% w/v) is sodium dodecyl sulfate prepared in 18 MΩ water. SDS is a detergent that is used for denaturation of proteins especially in polyacrylamide gel electrophoresis applications.

		Cat. No.
20% SDS	100 ml	HY-SDS-20-100
	500 ml	HY-SDS-20-500

10x Running Buffer

Hydra 10x Tris/Glycine/SDS Running Buffer, pH: 8.3, is formulated for separation of proteins in the denatured form on sodium dodecyl sulfate–polyacrylamide gel electrophoresis (SDS-PAGE). Hydra 10x Tris/Glycine/SDS Running Buffer provides a convenient way to ensure high quality, consistent, and reproducible electrophoresis results.

		Cat. No.
10x Running Buffer	500 ml	HY-RB10-500
	1000 ml	HY-RB10-1000

10x Tris-Glycine Buffer

Hydra Tris-Glycine Buffer (10x) is an ideal stock solution for preparing standard Tris- glycine transfer buffer used for Western blotting. Tris-Glycine Buffer (10x) is prepared with ultra-pure water and filter sterilized.

		Cat. No.
10x Tris-Glycine Buffer	500 ml	HY-TGB-500
	1000 ml	HY-TGB-1000

10x Phosphate Buffered Saline

Hydra 10x Phosphate- Buffered Saline (PBS) is a balanced salt solution which is used for a number of cell culture applications including washing cells before trypsinization, transport of cells or tissue samples, diluting cells for counting, and preparing reagents. Hydra PBS does not contain calcium and magnesium for rinsing chelators from the culture before cell dissociation.

		Cat. No.
(10x) Phosphate Buffered Saline	500 ml	HY-PBSX-10-500
	1000 ml	HY-PBSX-10-1000

10x Phosphate Buffered Saline with Tween® 20

Hydra 10x Phosphate-Buffered Saline with Tween® 20 (PBST) is a balanced salt solution which is used for especially western blotting and ELISA procedures. Hydra PBST enables washing without disturbing antibody-antigen binding interactions. Hydra PBST does not contain calcium and magnesium. Hydra 10x PBST should be diluted to 1x working solution. 1x formulation contains 0.05% Tween 20.

		Cat. No.
(10x) Phosphate Buffered Saline with Tween® 20	500 ml	HY-PBSXT-10-500
	1000 ml	HY-PBSXT-10-1000

10x Tris-Buffered Saline

Hydra 10x Tris-Buffered Saline (TBS) is a balanced pH stabilizing salt solution used for especially western blotting and ELISA procedures. Hydra TBS enables washing without disturbing antibody-antigen binding interactions. Hydra 10x TBS should be diluted to 1x working solution.

		Cat. No.
(10x) Tris-Buffered Saline	500 ml	HY-TBS05-10-500
	1000 ml	HY-TBS10-10-1000

20x Tris-Buffered Saline

Hydra 20x Tris-Buffered Saline (TBS) is a space-saving balanced pH stabilizing salt solution used for especially western blotting and ELISA procedures. Hydra TBS enables washing without disturbing antibody-antigen binding interactions. Hydra 20x TBS should be diluted to 1x working solution with a pH 7.6±0.1.

		Cat. No.
(20x) Tris-Buffered Saline	500 ml	HY-TBS05-20-500
	1000 ml	HY-TBS10-20-1000

10x Tris-Buffered Saline with Tween® 20

Hydra 10x Tris-Buffered Saline with Tween® 20 (TBST) is a balanced pH stabilizing salt solution used for especially western blotting and ELISA procedures. Hydra TBST enables washing without disturbing antibody-antigen binding interactions. Hydra 10x TBST should be diluted to 1x working solution. 1x formulation contains 0.1% Tween 20.

		Cat. No.
10x Tris-Buffered Saline with Tween® 20	500 ml 1000 ml	HY-TBST05-10-500 HY-TBST10-10-1000

20x Tris-Buffered Saline with Tween® 20

Hydra 20x Tris-Buffered Saline with Tween® 20 (TBST) is a space-saving balanced pH stabilizing salt solution used for especially western blotting and ELISA procedures. Hydra TBS enables washing without disturbing antibody-antigen binding interactions. Hydra 20x TBST should be diluted to 1x working solution. 1x formulation contains 0.1% Tween 20

		Cat. No.
20x Tris-Buffered Saline with Tween® 20	500 ml 1000 ml	HY-TBST05-20-500 HY-TBST10-20-1000

1M Tris

Hydra 1M Tris, pH 6.8, 7.4 , 8.0 and 8.5 is a pre-mixed and pH-adjusted ready to use sterile-filtered solution. Hydra 1M Tris, pH 6.8, 7.4 , 8.0 and 8.5 can be diluted to desired concentration and can be used in molecular biology or general biochemistry applications.

		Cat. No.
1M Tris pH 6.8	500 ml 1000 ml	HY-MTR068-500 HY-MTR068-1000
1M Tris pH 7.4	500 ml 1000 ml	HY-MTR074-500 HY-MTR074-1000
1M Tris pH 8.0	500 ml 1000 ml	HY-MTR080-500 HY-MTR080-1000
1M Tris pH 8.5	500 ml 1000 ml	HY-MTR080-500 HY-MTR080-1000

Cell Viability Detection Kit-8

Hydra Cell Viability Detection Kit-8 (CVDK-8) allows very convenient assays by utilizing its highly water- soluble tetrazolium salt. WST-8 [2-(2-methoxy-4-nitrophenyl)-3-(4-nitrophenyl)-5-(2,4- disulfophenyl)- 2H-tetrazolium, monosodium salt] produces a water-soluble formazan dye upon reduction in the presence of an electron mediator.

Hydra CVDK-8 is a one-bottle solution; no premixing of components is required. Hydra CVDK- 8, allows sensitive colorimetric assays for the determination of the number of viable cells in cell proliferation and cytotoxicity assays. WST-8 is reduced by dehydrogenases in cells to give an orange colored product (formazan), which is soluble in the tissue culture medium. The amount of the formazan dye generated by dehydrogenases in cells is directly proportional to the number of living cells. The detection sensitivity using NutriCulture CVDK-8 is higher than assays using other tetrazolium salts such as MTT, XTT, MTS or WST-1

		Cat. No.
Cell Viability Detection Kit-8	500 Reax.	HY-CVDK08-500

100x CellSAFE

Contamination of cell cultures is a frequent and important problem faced in cell and tissue culture laboratories. It results in delays in experimental schedules, and thus causes waste of precious time, money and efforts. 100x CellSAFE helps keeping your incubators clear of undesired contamination with its strong antimicrobial and fungicidal features against a wide variety of well-known lab contaminants, without effecting the morphology and proliferative potential of routinely used cells in cell and tissue culture laboratories.

		Cat. No.
100x CellSAFE	50 ml 100 ml	HY-CELLSAFE-50 HY-CELLSAFE-100

Trypan Blue

Trypan Blue, 0.4% Solution is a frequently used reagent to count cells in cell culture facilities when subculturing cells or using them in further functional in vitro and in vivo assays. It is also used to measure cell viability using dye exclusion assay, where only dead cells are stained with Trypan Blue, while viable cells are not stained.

		Cat. No.
Trypan Blue	100 ml	HY-TRYP-100

DMSO (Dimethyl Sulfoxide)

Hydra DMSO (Dimethyl Sulfoxide), Sterile, is a colorless, polar, aprotic organic solvent used in chemical research. It is miscible with water and many other organic solvents.

Hydra DMSO (Dimethyl Sulfoxide), Sterile, is also widely used in polymerase chain reactions (PCR) as a co- solvent, helping to inhibit the formation of secondary structures from DNA fragments and as a cryoprotectant vitrification agent for the preservation of cells, tissues and organs via prevention of ice crystal formation during cryopreservation.

		Cat. No.
DMSO (Dimethyl Sulfoxide)	50 ml 100 ml	HY-DMSO-50 HY-DMSO-100

Phosphate Buffered Saline (1x)

Hydra Phosphate-Buffered Saline (PBS) is a balanced salt solution, which is used for a number of cell culture applications including washing cells before trypsinization, transport of cells or tissue samples, diluting cells for counting, and preparing reagents. Hydra PBS does not contain calcium and magnesium for rinsing chelators from the culture before cell dissociation. Hydra PBS is prepared with ultra-pure water, filter sterilized and autoclaved.

		Cat. No.
Phosphate Buffered Saline	500 ml 1000 ml	HY-PBS-500 HY-PBS-1000

RPMI-1640

Hydra RPMI 1640, also known as RPMI Medium, was originally developed by Moore and his co- workers in 1966 Roswell Park Memorial Institute to culture human leukemia cells in suspension and monolayer. Hydra RPMI 1640 Medium was formulated for use in a 5% carbon dioxide atmosphere and has since been found suitable for culture of a variety of mammalian cells, including HeLa, Jurkat, MCF-7, PC12, PBMC, astrocytes, and carcinomas.

Hydra RPMI 1640 has also traditionally been used for the serum-free expansion of human lymphoid cells for karyotype analysis.

Each lot of Hydra RPMI 1640 is prepared from powdered base medium, tissue culture-grade water, and is sterile filtered using a 0.1 micron filter.

Each lot of Hydra RPMI 1640 is tested to confirm the absence of bacterial, fungal, and mycoplasma contamination.

		Cat. No.
RPMI-1640	500 ml	HY-RPMI-500

DMEM (High Glucose)

Dulbecco's Modified Eagle's Medium (DMEM) is a standard basal cell culture medium that is a modification of Basal Medium Eagle. Hydra DMEM contains four-fold concentrations of the amino acids and vitamins than the original Eagle's Minimal Essential Medium. The original formulation contained 1000 mg/L of glucose and was used to culture embryonic mouse cells. Since then, it has been modified in several ways to support the growth of primary fibroblasts, neurons, glial cells, HUVECs, and smooth muscle cells, as well as cell lines such as HeLa, HEK 293, Cos-7, and PC-12. Each of these media offers a different combination of L-glutamine and sodium pyruvate. Additionally, the glucose levels have been raised to 4500 mg/L, contributing to the name DMEM High Glucose. Each lot of Hydra DMEM High Glucose is prepared from powdered base medium, tissue culture-grade water, and is sterile filtered using a 0.1 micron filter. Each lot of Hydra DMEM High Glucose is tested to confirm the absence of bacterial, fungal, and mycoplasma contamination.

		Cat. No.
DMEM (High Glucose)	500 ml	HY-HDMEM-500

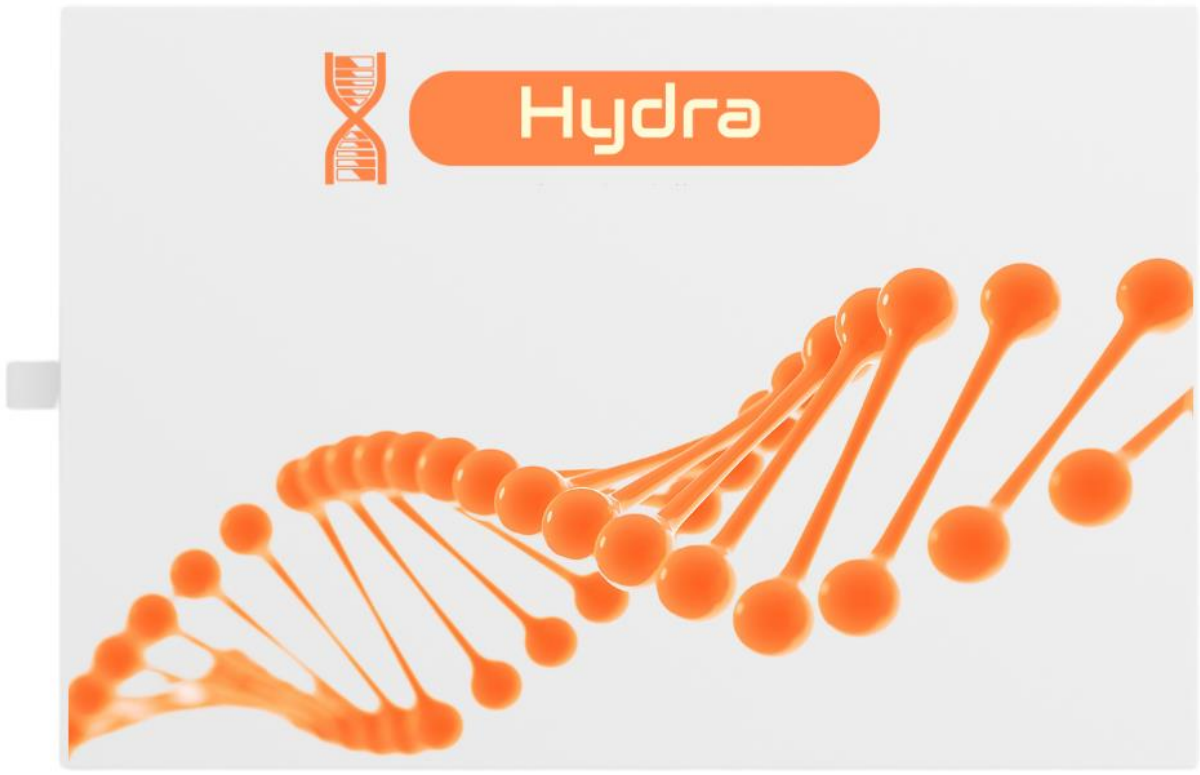
DMEM (Low Glucose)

Dulbecco's Modified Eagle's Medium (DMEM) is a standard basal cell culture medium that is a modification of Basal Medium Eagle. Hydra DMEM contains four-fold concentrations of the amino acids and vitamins than the original Eagle's Minimal Essential Medium. The original formulation contained 1000 mg/L of glucose and was used to culture embryonic mouse cells.

Since then, it has been modified in several ways to support the growth of primary fibroblasts, neurons, glial cells, HUVECs, and smooth muscle cells, as well as cell lines such as HeLa, HEK 293, Cos-7, and PC-12. Each of these media offers a different combination of L-glutamine and sodium pyruvate. The glucose levels have been kept as 1000 mg/L, contributing to the name DMEM Low Glucose. Each lot of Hydra DMEM Low Glucose is prepared from powdered base medium, tissue culture-grade water, and is sterile filtered using a 0.1 micron filter. Each lot of Hydra DMEM Low Glucose is tested to confirm the absence of bacterial, fungal, and mycoplasma contamination.

		Cat. No.
DMEM (Low Glucose)	500 ml	HY-LDMEM-500

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

		Cat. No.
Proteinase K (Lyophilized)	20 mg	HY-PASEK-20
	100 mg	HY-PASEK-100
	1gr	HY-PASEK-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
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- 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

		Cat. No.
Proteinase K (Liquid) 20 mg/ml	1 ml	HY-PASEKL-1
	5 ml	HY-PASEKL-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

		Cat. No.
RNase A (Lyophilized)	20 mg	HY-RNAZ-20
	100 mg	HY-RNAZ-100
	1gr	HY-RNAZ-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

		Cat. No.
Rnase A (Liquid) 20 mg/ml	1 ml	HY-RNAZL-1
	5 ml	HY-RNAZL-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

		Cat. No.
DNase I (Lyophilized)	20 mg	HY-DNAZ-20
	100 mg	HY-DNAZ-100
	1gr	HY-DNAZ-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

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- 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

		Cat. No.
DNase I (Liquid) 20 mg/ml	1 ml	HY-DNAZ-02-1
	5 ml	HY-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

		Cat. No.
Agarose	100 gr	HY-AGR-100
	500 gr	HY-AGR-500

Nuclease Free Ultra-Pure Water

Hydra Nuclease Free Ultra-Pure Water is prepared under stringent conditions and is suitable for all applications in a molecular biology laboratory. Hydra Nuclease Free Ultra-Pure Water goes through, deionization, reverse osmosis, UV-treatment, 0.2µm filtration, and double autoclave to ensure sterility, being free of nucleases and to completely eliminate the byproducts of DEPC.

		Cat. No.
Nuclease Free Ultra-Pure Water	100 ml	HY-UTPW-100
	500 ml	HY-UTPW-500
	2 ml	HY-UTPW-2

PLASTIC CONSUMABLES

Filter Pipette Tips 10 µL

Type: Filtered Tips, Barrier Tips. Sterile , Dnase /Rnase Free
Volume: 10 µL,

		Cat. No.
Filter Pipette Tips 10 µL	96 / Rack	HY-FPTİPS-10

Filter Pipette Tips 100 µL

Type: Filtered Tips, Barrier Tips. Sterile , Dnase /Rnase Free
Volume: 100 µL,

		Cat. No.
Filter Pipette Tips 100 µL	96 / Rack	HY-FPTİPS-100

Filter Pipette Tips 200 µL

Type: Filtered Tips, Barrier Tips. Sterile , Dnase /Rnase Free
Volume: 200 µL,

		Cat. No.
Filter Pipette Tips 200 µL	96 / Rack	HY-FPTİPS-200

Filter Pipette Tips 1000 µL

Type: Filtered Tips, Barrier Tips. Sterile , Dnase /Rnase Free
Volume: 1000 µL,

		Cat. No.
Filter Pipette Tips 1000 µL	96 / Rack	HY-FPTİPS-1000

Non - Sterile Pipette Tips 10 µL

Type: Non- Sterile Tips,
Volume: 10 µL,

		Cat. No.
Non- Sterile Pipette Tips 10 µL	Package / 500	HY-NONTİPS-500-10
	Package / 1000	HY-NONTİPS-1000-10

Non - Sterile Pipette Tips 200 µL (Yellow)

Type: Non- Sterile Tips,
Volume: 200 µL,

		Cat. No.
Non- Sterile Pipette Tips 200 µL (Yellow)	Package / 500	HY-NONTİPSYELLOW-500-200
	Package / 1000	HY-NONTİPSYELLOW-1000-200

Non - Sterile Pipette Tips 1000 µL (Blue)

Type: Non- Sterile Tips,
Volume: 1000 µL,

		Cat. No.
Non- Sterile Pipette Tips 1000 µL (Blue)	Package / 500	HY-NONTİPSBLUE-500-1000
	Package / 1000	HY-NONTİPSBLUE-1000-1000

Sterile and Non – Sterile Falcon Tube (15 mL)

Type: Sterile
Volume: 15 ml

		Cat. No.
Sterile Falcon Tube 15 ml	Package / 25	HY-SFALCON-25-15
	Package / 50	HY-SFALCON-50-15
	Package / 100	HY-SFALCON-100-15

Type: Non-Sterile
Volume: 15 ml

		Cat. No.
Non-Sterile Falcon Tube 15 ml	Package / 25	HY-NS-FALCON-25-15
	Package / 50	HY-NS-FALCON-50-15
	Package / 100	HY-NS-FALCON-100-15

Sterile and Non – Sterile Falcon Tube (50 mL)

Type: Sterile
Volume: 50 ml

		Cat. No.
Sterile Falcon Tube 50 ml	Package / 25	HY-SFALCON-25-50
	Package / 50	HY-SFALCON-50-50
	Package / 100	HY-SFALCON-100-50

Type: Non-Sterile
Volume: 50 ml

		Cat. No.
Non-Sterile Falcon Tube 50 ml	Package / 25	HY-NS-FALCON-25-50
	Package / 50	HY-NS-FALCON-50-50
	Package / 100	HY-NS-FALCON-100-50

Sterile and Non – Sterile Eppendorf Tube (1.5 mL)

Type: Sterile, Dnase/ Rnase Free
Volume: 1.5 ml

		Cat. No.
Sterile Eppendorf Tube 1.5 ml	Package / 500 (amount) Package / 1000 (amount)	HY-SEPPENDORF-500-1.5 HY-SEPPENDORF-1000-1.5

Type: Non-Sterile
Volume: 1.5 ml

		Cat. No.
Non-Sterile Eppendorf Tube 1.5 ml	Package / 500 (amount) Package / 1000 (amount)	HY-NS-EPPENDORF-500-1.5 HY-NS-EPPENDORF-1000-1.5

Sterile and Non – Sterile Eppendorf Tube (2.0 mL)

Type: Sterile, Dnase/ Rnase Free
Volume: 2.0 ml

		Cat. No.
Sterile Eppendorf Tube 2.0 ml	Package / 500 (amount) Package / 1000 (amount)	HY-SEPPENDORF-500-2.0 HY-SEPPENDORF-1000-2.0

Type: Non-Sterile, Dnase/ Rnase Free
Volume: 2.0 ml

		Cat. No.
Non-Sterile Eppendorf Tube 2.0 ml	Package / 500 (amount) Package / 1000 (amount)	HY-NS-EPPENDORF-500-2.0 HY-NS-EPPENDORF-1000-2.0

PCR Tube (0.2 mL)

Type: Sterile, Dnase/Rnase Free
Volume: 0.2 ml

		Cat. No.
PcTube 1.5 ml	Package / 500 (amount) Package / 1000 (amount)	HY-PCRTUBE-500-0.2 HY-PCRTUBE-1000-0.2

96 Well Pcr Plate (White) and Seal

Type: 96 Well Pcr Plate
Volume: 0.1 ml

		Cat. No.
96 Well Pcr Plate 0.1 ml	Package / 10 (amount)	HY-PCRPLATE-96-0.1
Pcr Plate Seal	Package / 10 (amount)	HY-PCRSEAL-96-0.1

8 Well Strip Tubes and Caps

Type: 8 Well Strip Tubes and Caps
Volume: 0.1 ml

		Cat. No.
8 Well Strip Tube 0.1 ml	Package / 8x125 (amount)	HY-PCRSTRIP-8-0.1
8 Well Strip Tube Caps 0.1 ml	Package / 8x125 (amount)	HY-PCRSTRIPCAPS-8-0.1

4 Well Strip Tubes and Caps

Type: 4 Well Strip Tubes and Caps
Volume: 0.1 ml

		Cat. No.
4 Well Strip Tube 0.1 ml	Package / 250 (amount)	HY-PSTRIP-4-0.1
4 Well Strip Tube Caps 0.1 ml	Package / 250 (amount)	HY-PSTRIPCAPS-4-0.1

Aseptic and Gama Sterile Polystyrene Petri Dish (90 mm)

Type: Aseptic, Polystyrene, Autoclavable
Volume: 90 mm

		Cat. No.
Aseptic Petri Dish 90 mm	Package /20 (amount)	HY-A-PETRI-20-90
	Package /28 (amount)	HY-A-PETRI-28-90

Type: Gama Sterile, Polystyrene, Autoclavable
Volume: 90 mm

		Cat. No.
Gama Sterile Petri Dish 90 mm	Package /20 (amount)	HY-GAMA-PETRI-20-90
	Package / 28 (amount)	HY-GAMA-PETRI-28-90

Aseptic and Gama Sterile Polystyrene Petri Dish (60 mm)

Type: Aseptic, Polystyrene, Autoclavable
Volume: 60 mm

		Cat. No.
Aseptic Petri Dish 60 mm	Package /20 (amount)	HY-A-PETRI-20-60
	Package /28 (amount)	HY-A-PETRI-28-60

Type: Gama Sterile, Polystyrene, Autoclavable
Volume: 60 mm

		Cat. No.
Gama Sterile Petri Dish 60 mm	Package /20 (amount)	HY-GAMA-PETRI-20-60
	Package / 28 (amount)	HY-GAMA-PETRI-28-60

Sterile and Non – Sterile Pasteur Pipette (3 mL)

Type: Sterile, Dnase/ Rnase Free
Volume: 3 ml

		Cat. No.
Sterile Pasteur Pipette 3 ml	Package / 500 (amount) Package / 1000 (amount)	HY-S-PASTEUR-500-3 HY-S-PASTEUR-1000-3

Type: Non-Sterile, Dnase/ Rnase Free
Volume: 3 ml

		Cat. No.
Non-Sterile Pasteur Pipette 3 ml	Package / 500 (amount) Package / 1000 (amount)	HY-NS-PASTEUR-500-3 HY-NS-PASTEUR-1000-3

Sterile and Non – Sterile Cryo Tube (2 mL)

Type: Sterile, Dnase/ Rnase Free
Volume: 2 ml

		Cat. No.
Sterile Cryo Tube 2 ml	Package / 50 (amount) Package / 100 (amount)	HY-S-CRYO-50-2 HY-S-CRYO-100-2

Type: Non-Sterile, Dnase/ Rnase Free
Volume: 2 ml

		Cat. No.
Non-Sterile Cryo Tube 2 ml	Package / 50 (amount) Package / 100 (amount)	HY-NS-CRYO-50-2 HY-NS-CRYO-100-2

Sterile Serological Pipette (1 mL) (Individually Wrapped)

Type: Sterile, Dnase/ Rnase Free
Volume: 1 ml

		Cat. No.
Serological Pipette 1 ml	Package / 50 (amount) Package / 100 (amount)	HY-S- SEROLOGICAL-50-1 HY-S- SEROLOGICAL-100-1

Sterile Serological Pipette (2 mL) (Individually Wrapped)

Type: Sterile, Dnase/ Rnase Free
Volume: 2 ml

		Cat. No.
Serological Pipette 2 ml	Package / 50 (amount) Package / 100 (amount)	HY-S- SEROLOGICAL-50-2 HY-S- SEROLOGICAL-100-2

Sterile Serological Pipette (5 mL) (Individually Wrapped)

Type: Sterile, Dnase/ Rnase Free
Volume: 5 ml

		Cat. No.
Serological Pipette 5 ml	Package / 50 (amount) Package / 100 (amount)	HY-S- SEROLOGICAL-50-5 HY-S- SEROLOGICAL-100-5

Sterile Serological Pipette (10 mL) (Individually Wrapped)

Type: Sterile, Dnase/ Rnase Free
Volume: 10 ml

		Cat. No.
Serological Pipette 10 ml	Package / 50 (amount) Package / 100 (amount)	HY-S- SEROLOGICAL-50-10 HY-S- SEROLOGICAL-100-10

Sterile Serological Pipette (25 mL) (Individually Wrapped)

Type: Sterile, Dnase/ Rnase Free
Volume: 25 ml

		Cat. No.
Serological Pipette 25 ml	Package / 50 (amount) Package / 100 (amount)	HY-S- SEROLOGICAL-50-25 HY-S- SEROLOGICAL-100-25

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