



**KIAGEN** **Teb**

to Materialize your Dearms  
In **Molecular Biology**

## KIA Gel Documentation Systems

### KIA DigiDoc System

Compact Digimage System uses a digital camera with 14 mega pixel resolution. It is computer free for compact space requirements and small budget. One integrated chamber with a built-in UV transilluminator and viewing images from the large 8" TFT color liquid crystal display are its specific features. The system is suitable to capture image for fluorescent gels, colorimetric gels, auto radiography film, and blotting membrane and others. In addition several analysis software packages can be used after capturing images from Compact Digimage system.



### KIA CCD Gel Documentation System

Kia CCD Gel documentation system is a stand alone gel documentation system featuring a combination of simplicity, versatility and reliability. It comes with a high quality 1.4 mega pixel scientific grade cooled CCD camera, a built-in 11.6" windows based tablet and a smart cabinet, making the easiest handling of high quality bio-image acquisition and analysis.

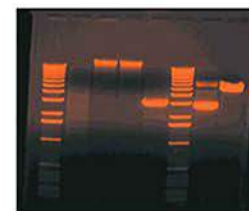


#### The best lab standard

- Ideal for publication and routine documentation
- Save JPEG or TIFF images to the USB Flash memory
- Multi- positions filter wheel to cover virtually all applications
- Open to most fluorescent dyes available on the market
- Single or dual wavelength transilluminator, 20x20 cm

#### Camera and optics

- 1.4 MP / scientific cooled CCD / USB connection, 8/16-bit pixel depth (65 536 grey levels)
- Extreme sensitivity for the faintest fluorescence sample
- Scientific grade camera with electronically variable shutter speed
- Exposure time adjustment up to 60 min
- Free software for image acquisition, annotation



### Ultraviolet Transilluminators

Kiagen produce multi- applications transilluminator which work for an extended range of dyes including SYBR-Green®, Ethidium bromide, SYBR Gold®, SYBR Safe®, Sypro Orange®, Sypro Ruby®, Gel Star®

The UV filter stops all the visible light emitted by the tubes, making the transilluminator simply perfect for a large number of applications.



### Specifications

Models	Description	nm	Filter (mm)	Tubes
UVT-20S	Mono Wavelength	254nm – 8-watt	200 x 200	(6 x 254nm)
UVT-20M	Mono Wavelength	312nm – 8-watt	200 x 200	(6 x 312nm)
UVT-20SL	Dual Wavelength	365nm / 254nm – 8-watt	200 x 200	(6 x 254nm) + (5 x 365nm)
UVT-20SM	Dual Wavelength	254nm / 312nm – 8-watt	200 x 200	(6 x 254nm) + (5 x 312nm)
UVT-20ML	Dual Wavelength	312nm / 365nm – 8-watt	200 x 200	(5 x 365nm) + (5 x 312nm)



## Plate Fuge centrifuge

### Centrifuge for MicroPlates

Kiagen PlateFuge is the a "mini" sized centrifuge with a fix for microplates. Centrifuging plates before PCR ensures all reactants are in the bottom of the wells for proper concentrations and improved yields. In spite of its remarkably small footprint, the PlateFuge includes a uniquely designed, rotor capable of securing 2 microplates. The easily accessible rotor chamber includes two plate carriers that rest at a 85° angle. This allows plates to be inserted confidently without sealing tapes or caps. Any droplets on the walls of the plate quickly concentrate into the well bottoms.

- Quickly spins down droplets in PCR plates
- Unique rotor design prevents sample spillage
- 20% smaller than traditional centrifuges
- Accepts all popular PCR plates



Specifications	
Parameter	Value
Speed of rotation	Up to 1400 rpm
Acceleration time	30 sec
Continues work time	Up to 20 min
Rotor capacity	2x96 0.2 ml microplate
Voltage	220 V, 50 Hz
Dimensions	222x170x180 mm
Weight	2.5 kg
Compatibility with the requirements of electro safety	Class 01

## Mini/Fuge Vortex

- \* Personal microcentrifuge/vortex designed for investigation in the field of genetic engineering, molecular biology, ecological monitoring, industrial laboratories, etc.
- \* It is a combination of microfuge and vortex.
- \* Easy to work and very practical.
- \* Structure is very simple and unique.
- \* Special rotor design to eliminat needs to protective door

### Specifications

- \* Rotor for 0.2, 0.5, 1.5 & 2.0 ml tubes 10 +10+10 sockets
- \* Rotor for 0.2 ml tube 4x8 stips
- \* Rotation speed 2800 rpm
- \* Time of acceleration 2 sec.
- \* Power consumed 50 wattsDimension 16 x 14x 15 cmVoltage 220 V, 50 Hz



## PCR Workstation Ionic

KIACab PCR Workstation brings UV radiation to create an environment against PCR contamination. Control potential PCR contamination with the built-in KIACab PCR for inactivation of DNA between experiments. The shortwave ultraviolet irradiation can be used as a standard laboratory practice to reduce surface and airborne contaminants in the chamber. A safety shut-off switch automatically turns the ultraviolet light off when the door is open. Air circulates from the KIACab ionic system into the PCR chamber via an air clean system with high/low settings. Control potential PCR contamination with built-in KIACab for inactivation of DNA.

### Specifications:

- |                        |  |
|------------------------|--|
| * 254nm UV (60 W)      | Chamber top assembly                     |
| * White (60 W)         | Chamber top assembly                     |
| * UV Timer             | 0-199 minute                             |
| * Acrylic panels       | block wavelengths below 400nm            |
| * Dimensions:          | 737 x 737 x 510 mm                       |
| * Bottomn              | Stainless steel                          |
| * Top aterial          | Acrylic plexiglass                       |
| * Door and Side Panels | Polyaronat (10 mm) blocks UV below 400nm |

### Air purifier system

- Cold cathode U.V light assures long working life
- Breaks down poisonous fumes and VOCs into CO2 and H2O
- Eliminates odors, vapors, ozon and other peculiar smell
- Kills germs, viruses, fungi and bacteria
- Emits more than 4,500,000 ions to improve air quantity



## UV Crosslinker

The Kia crosslinker is a complete, microprocessor controlled UV irradiation system, mainly dedicated to the linking of nucleic acid to membranes and elimination of PCR contamination. Its innovative design ensures unique features:

The programmable microprocessor constantly emit the UV light. The irradiation stops automatically when the energy received matches the programmed energy. The readout display and the large number of presets, in either energy unit (Joules/cm<sup>2</sup>) or time unit (sec) makes the it a very simple instrument to use while very powerful.

### Application

- Crosslinking of DNA and RNA to nylon or nitrocellulose membranes for blots
- Nicking of ethidium bromide stained DNA in agarose gels
- RecA mutation screening
- Elimination of PCR contamination
- UV sterilisation & UV curing of polymers
- Gene mapping for creating cleavage-inhibiting thymine dimers



## Dry Block Incubators

The Dry Plate incubators find many applications in molecular biology, microbiology and clinical laboratory for incubation, boiling, inactivation, wet ashing, sample concentration and enzyme analysis and other general uses. The block is made of an aluminum all with excellent thermal conductivity and has different hole sizes for 1.5 & 0.5 ml microtubes. A close fit of the block holes ensure efficient heat transfer, while the heater design, temperature sensor PTC, digital display and solid state circuitry gives exceptionally good temperature control uniformity.

### Applications & Features

- Designed for Multi-function Digital Dry Heating.
- Ideal for Enzyme Reactions, Inactivation of Sera, Incubation, and other laboratory procedures.
- Precise Temperature Control: RT-105°C with 0.1°C accuracy
- Simplest Control and Digital LCD With Back-Light Function.
- Heating time adjustment up 99 hr 59 min.



## Ecological Ethidium Bromide Removal System

The ET-Adsorb® Ethidium Removal System provides an elegant and easy way to remove large quantities of Ethidium from contaminated inorganic solutions. The cartridge has a total capacity of at least 1 g of Ethidium. This equals to 1,000 l of a typical electrophoresis buffer or staining solution ( at a concentration of 5 µg/ml). Saturated cartridges can be disposed of via incineration.

### Ideal for:

- Sustainable handling of Ethidium Bromide solutions
- Easy to use: no pumps nor valves
- Easy exchange of cartridges
- Buffer reservoir of 5 lit.
- Flow rate: approximately 2.0 l/hour
- Cartridge disposal via incineration





## Kia DNA & Protein Markers

### 50 bp DNA Ladder

**Concentration:** 0.10 mg/ml (100 ng/μl)

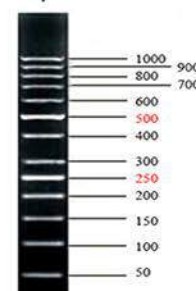
**Description**

The 50bp DNA Ladder is composed of thirteen linear double stranded DNA bands. This ready-to-use product is premixed with 1xDNA loading buffer. Based on experiment requirement, 5μl marker can be directly loaded for gel electrophoresis. To provides simple operation and produces clear image. For easy reference on agarose gels, the 250 and 500 bp bands (100 ng/5 μl) is brighter than the other bands (50 ng/5 μl).

**Composition**

50 bp, 100 bp, 150 bp, 200 bp, 250 bp, 300 bp, 400 bp, **500 bp**, 600 bp, 700 bp, 800 bp, 900 bp, 1000 bp.

50 bp Ladder Plus



### 100 bp DNA Ladder

**Concentration:** 0.10 mg/ml (100 ng/μl)

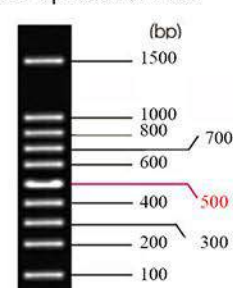
**Description**

The 100bp DNA Ladder is composed of eleven linear double stranded DNA bands. This ready-to-use product is premixed with 1xDNA loading buffer. Based on experiment requirement, 5μl marker can be directly loaded for gel electrophoresis. To provides simple operation and produces clear image. For easy reference on agarose gels, the 500 bp band (100 ng/5 μl) is brighter than the other bands (50 ng/5 μl).

**Composition**

100 bp, 200 bp, 300 bp, 400 bp, **500 bp**, 600 bp, 700 bp, 800 bp, 900 bp, 1000 bp.

100 bp Ladder Plus



### 1 kb DNA Ladder

**Concentration:** 0.09 mg/ml (90 ng/μl)

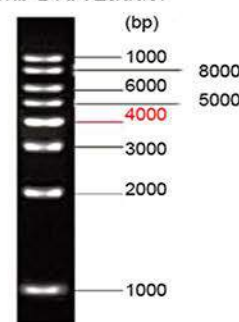
**Description**

1kb DNA Ladder is composed of eight linear double-stranded DNA bands. This ready-to-use product is premixed with 1x DNA loading buffer. Based on experiment requirement, 5μl marker can be directly loaded for gel electrophoresis. To provides simple operation and produces clear image. For easy reference on agarose gels, the 4000 bp band (100ng/5 μl) is brighter than the other bands (50 ng/5 μl)

**Composition**

1000 bp, 2000 bp, 3000 bp, **4000 bp** (100 ng/5 ul, the double intensity band), 5000 bp, 6000 bp, 8000 bp, 10000 bp.

1kb DNA Ladder



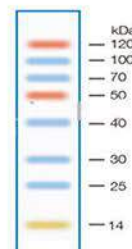
### Prestained Protein marker (14-100 kDa)

**Concentration:** about 2 μg/5 μl for each band

**Description**

Prestained Protein Marker is composed of seven prestained proteins ranging from 14 kDa to 100 kDa. The protein of 5 kDa band is covalently coupled to orange dye. The protein of 14 kDa is covalently coupled to yellow dye. The other five proteins are covalently coupled to blue dye. After SDS-PAGE and transferred to PVDF or NC membrane, clear color protein bands are gained and show the direction at the same time.

- \* Five blue bands, one orange band and one yellow band.
- \* MW range from 14 kDa to 100 kDa.
- \* Ready-to-use format, no heating and reductant are required.



10% Tris-glycine SDS gel (5 μl/well)

### Western Blot Protein marker (25-90 kDa)

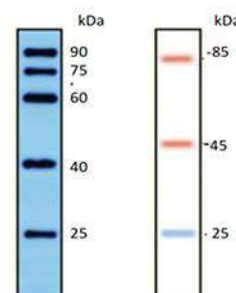
**Concentration:** about 2 μg/5 μl for each band

**Description**

Western blot protein marker is composed of eight proteins ranging from 25 kDa to 90 kDa. Protein bands of 25 kDa, 45 kDa and 85 kDa are prestained allowing easy identification and monitoring of your proteins during electrophoresis and membrane transfer. Other five proteins contain several IgG binding sites, allowing marker visualization using the same reagents and protocol for your target proteins. These no-dye detached proteins result in more accurate molecular weight estimation.

- \* Prestained bands for monitoring electrophoresis and membrane transfer.

- \* Visualizing molecular weight marker on western blots with the commonly used immuno-detection methods.
- \* Ready-to-use format, no heating and reductant are required.
- \* Five blue bands, one orange band and one yellow band.
- \* MW range from 14 kDa to 100 kDa.
- \* Ready-to-use format, no heating and reductant are required.



## PCR Related Products:

### Kia PCR & RT-PCR Mastermixes

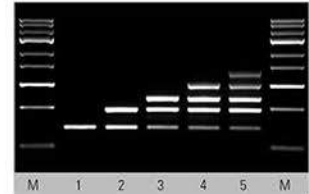
#### Kia *Taq*-PCR SuperMix (100 Reactions)

PCR SuperMix is a ready-to-use mixture of Taq DNA Polymerase, dNTPs and optimized buffer. The supermix is provided at 2X concentration and used at 1X concentration by adding template, primers and H<sub>2</sub>O. PCR products are unsuitable for PAGE.

- The extension rate is about 1-2 kb/min.
- Template-independent "A" can be generated at the 3' end of the PCR product.
- PCR products can be cloned into T vectors.
- Amplification of genomic DNA fragment up to 4kb.

#### Advantages

- High efficiency amplification
- Excellent stable performance



#### Kia RT SuperMix (50 Reactions)

The Kia RT Supermix provides all the necessary components for cDNA synthesis from total RNA or mRNA. The cDNA is efficiently synthesized by RT/RI Enzyme Mix and 2×ES Reaction Mix.

- Deficient RNase H activity to reduce RNA template degradation during the first-strand cDNA synthesis.
- Anchored Oligo(dT)18 Primer for higher yield and more full length cDNA.
- cDNA up to 8 kb.

#### Quality Control:

Activity, SDS-PAGE, dsDNase, RNase, endonuclease/nickase, first-strand cDNA synthesis.

#### Applications

Multiple copy gene detection



### Kia One-Step RT-PCR SuperMix

Kia One-Step RT-PCR combines the first-strand cDNA synthesis with PCR in the same tube to simplify reaction set up and reduce the possibility of contamination. Only gene-specific primers can be used for One-Step RT-PCR. Reverse Transcriptase and Taq DNA polymerase are used in the kit.

#### Advantages

- High efficiency cDNA synthesis with One-Step Enzyme Mix and 2X One-Step Reaction Mix, followed by PCR amplification with resulting cDNA. Simple procedure helps to minimize contamination.
- Amplification product contains base "A" at 3' end. Purified product is well suitable for cloning into T vectors.
- Amplified fragment up to 4 kb.

#### Applications

Multiple copy gene detection

#### Content:

2X One step RT-PCR Supermix containing:  
 Hotstart Taq DNA polymerase.  
 Reverse transcriptases.  
 dNTP mix including dATP, dCTP, dGTP, dTTP.  
 5mM MgCl





## PCR Related Products:

### Kia qPCR & qRT-PCR Mastermixes



#### Kia qPCR SuperMix (100 reactions)

##### Description

Kia qPCR SuperMix is design in 2 types.

**Type P** is a ready-to-use qPCR cocktail containing a special Taq DNA Polymerase, optimized double cation buffer, dNTPs, PCR Enhancer and PCR stabilizer. qPCR SuperMix is provided at 2 x concentration and can be used at 1x concentration by adding template, primer, probe, passive reference dye (optional) and H<sub>2</sub>O. his kit takes advantage of using fluorescent probe (TaqMan or Molecular Beacon). in PCR reaction system. During the procedure of PCR amplification, the level of fluorescence signal is proportional to the amount of amplified products, thus the amount of nucleic acid in samples can be assessed by the intensity of fluorescence signal.

**Type G** is a ready-to-use qPCR cocktail containing a special Taq DNA Polymerase, optimized double cation buffer, SYBR Green I fluorescence dye, dNTPs, PCR Enhancer and PCR stabilizer. qPCR SuperMix is provided at 2x concentration and can be used at

##### Advantages

- \* S-Taq DNA Polymerase, a novel "hot start" enzyme with double blocking technique, provides high sensitivity, high specificity and accurate data.
- \* Double cation (K<sup>+</sup>, NH<sub>4</sub>) buffer enhances the specificity and reduces primer-dimer formation.
- \* Passive reference dyes are suitable for different qPCR instruments (normalize the fluorescent signal between reactions).

#### Kia One-Step qRT-PCR SuperMix (100 reations)

##### Description

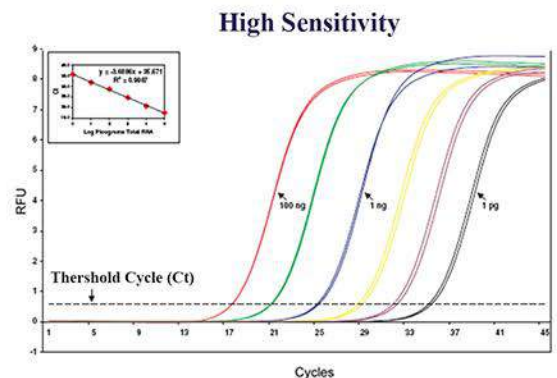
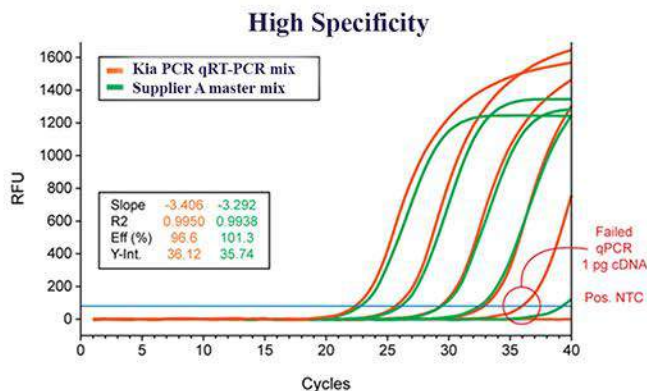
Kia One-Step qRT-PCR SuperMix is a one-step qRT-PCR kit which provides high sensitivity, high efficiency cDNA synthesis and qPCR amplification. RNA template and reverse gene specific primer

##### Advantages

- \* High efficiency cDNA synthesis with One-Step Enzyme Mix and Green qPCR SuperMix, followed by PCR amplification with resulting cDNA. Simple procedure helps to minimize contamination
- \* High sensitivity, high specificity, accurate data.

##### Applications

Multiple copy and low copy gene detection  
Viral RNA and trace RNA detection



### KiaDirect™ PCR Kits (*from blood, animal and plant tissue*)

##### Description

KiaDirect PCR Kits use a unique lysis buffer to lyse animal/plant tissues (fresh or frozen) and blood. Resulting lysate without purification can be directed used as template for PCR amplification. 2xKiaDirect™ PCR SuperMix (+dye) is highly resistant to various PCR inhibitors present in sample. PCR product can be directly used for gel electrophoresis.

##### Applications

- \* Direct amplification from unpurified lysate.
- \* Suitable for high throughput applications.
- \* Suitable for mammalian cells, saliva, hair shaft, animal/plant tissues and blood.
- \* Amplification of genomic DNA fragment up to 3 kb.

Kiagen Teb Company is a producer and supplier of Molecular Biology Instruments and reagents for research and diagnostic labs in Iran with 15 years experience. Our goal is to exceed the expectations of every client by offering best quality products and services, thereby ensuring that our client receive the most effective and professional services. Kiagen is involved in every stage upon client from implementation to completion offering continual functional and technical support.

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Kiagen Teb Co. LTD

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