

# Nucleic Acid Automatic Extraction

Nucleic Acid  
Automatic Extraction

# TS-32 Automated Nucleic Acid Extractor

The TS-32 Automated Nucleic Acid Extractor, based on advanced magnetic beads separation technology, possesses the advantages of a high degree of automation, high-speed extraction, stable results, and simple operation. All extraction procedures of the automated nucleic acid extractor can be completed in 32-well deep-well plates without centrifugation or filtration procedures required by a routine extraction. This system enables simultaneous and rapid purification of 1 to 32 samples (including blood, tissues, cells, swabs, viruses, and other clinical or forensic specimens). The isolated high-quality nucleic acid (DNA/RNA) can be used for high-sensitivity downstream analysis, such as real-time PCR, clinical molecular diagnostics, gene expression analysis, gene analysis, forensics, infectious disease research, etc. Furthermore, cost-effective pre-filled ready-to-use extraction kits will be provided for users' convenience.



## Big Screen with Both Chinese and English Languages

Big color touch screen; Chinese and English languages; Easy to use



## Precise Control

The built-in engineering computer endows the system with the capability of operating independently without a PC, which saves more space and energy, and provides a highly stable automatic control system



## Temperature Control

Temperature Control  
Users can define lysis and elution temperature according to experimental requirements



## Stable Results

Avoid deviations and errors caused by manual operation, ensuring stable results and good repeatability.



## Fast Extraction

Automated operation, fast and efficient, 1-32 sample extraction can be completed as soon as 12 minutes.



## User-defined Programming

Powerful programming functions support a more flexible and efficient program edition to meet different reagent requirements. USB disk guide/export program available.



## Safe and Stable

UV lights and negative pressure fans reduce air-solid pollution, safety doors can prevent operation errors, extract stably, and ensure safety.



## Flexible Compatibility

The system operation is flexible and open, compatible with a variety of nucleic acid extraction reagents.

## Product Parameters

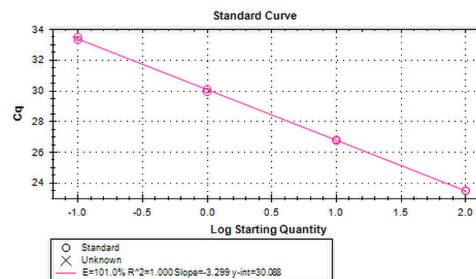
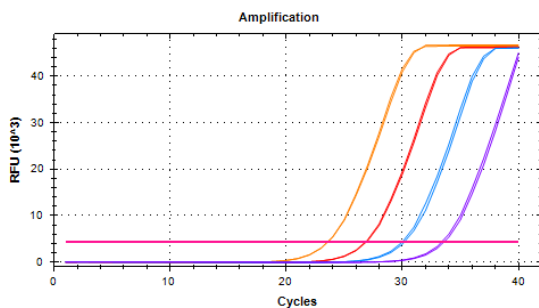
Sample Flux	1-32
Processing Volume	20-1000 $\mu$ l
Recovery Rate of Magnetic Rods	>98%
Temperature Control Range	Room Temperature~120°C;
Operating Interface	7-inch LCD screen
Procedure Management	Add, Edit, Delete, Copy, Import, Export
External Interface	USB 2.0 Port, LAN Port
Contamination Control	Ultraviolet Disinfection
Power Conditions	AC220-240 V, 50/60 Hz, 350 VA
Product Size (Length $\times$ Width $\times$ Height)	394 mm $\times$ 420 mm $\times$ 370 mm
Weight	22 kg

# 01 MagicPure<sup>®</sup> Simple 32 Viral DNA/ RNA Kit

This kit utilizes a unique lysis buffer to lyse virus and release DNA / RNA. The released DNA/ RNA are effectively purified after specifically binding to silica magnetic beads. It is suitable for isolating viral DNA/ RNA from up to 200  $\mu$ l of plasma, serum, whole blood, tissue homogenate, cell-free body fluid, nasopharyngeal or oropharyngeal aspirate/ wash, bronchoalveolar lavage fluid (BALF), tracheal aspirate, sputum, nasopharyngeal or oropharyngeal swab, and animal cell culture supernatant. The isolated DNA/RNA with high purity can be applied in PCR, RT-PCR, qPCR, qRT-PCR, etc. This kit is compatible with 32-channel magnetic-rod automated nucleic acid extractor.

- Simple procedures; no centrifugation required
- No protease K is required; high purity
- Extract fast, 12 minutes can be completed

## Experimental results



The PRV quality control products diluted with  $10^1$ ,  $10^2$ ,  $10^3$ , and  $10^4$  were used as templates. After extracting nucleic acids, qPCR detection (TransGen, AQ712) was performed. Results showed that the TransGen product extraction gradient concentration sample nucleic acid had a good linear relationship.

# 02

## MagicPure<sup>®</sup> 32 Blood Genomic DNA Kit

This kit utilizes the enzymatic lysis method to lyse blood and silica magnetic beads to specifically bind to DNA. The silica magnetic beads have a strong magnetic attraction for the targeted DNA in the buffer system. The DNA will be released by the change of ionic strength, resulting in rapid DNA extraction. This kit can be used for the efficient isolation of genomic DNA from 50  $\mu$ l to 250  $\mu$ l of fresh, frozen blood or blood treated with anticoagulants. The isolated DNA with high purity can be applied in enzyme digestion, PCR, qPCR, Southern Blot, or other experiments. This kit is compatible with 32-channel magnetic-rod automated nucleic acid extractors.

- Simple procedures; no centrifugation required; high-speed extraction
- High yield; high purity

# 03

## MagicPure<sup>®</sup> 32 Buccal Swab Genomic DNA Kit

This kit utilizes a unique lysis buffer and Proteinase K to lyse cells from buccal swabs. The released DNA is effectively purified after specifically binding to magnetic beads. It is suitable for isolating gDNA from buccal swab samples (cotton swabs or nylon-flocked swabs). The isolated gDNA can be used in PCR, qPCR, enzyme digestion, library preparation, or other experiments. This kit is compatible with 32-channel magnetic-rod automated nucleic acid extractor.

- Simple procedures; no centrifugation required; high-speed extraction
- High yield; high purity

# TS-96 Automated Nucleic Acid Extractor

TS-96 Automated Nucleic Acid Extractor, based on advanced magnetic beads separation technology, possesses the advantages of a high degree of automation, high-speed extraction, stable results, and simple operation. All extraction procedures of the automated nucleic acid extractor can be completed in 96-well deep-well plates without centrifugation or filtration procedures required by a routine extraction. This system enables simultaneous and rapid purification of 1 to 96 samples (including blood, tissues, cells, secretions, bacteria, plants, forensic materials, amplified products, or other specimens). The isolated high-quality nucleic acid (DNA/RNA) can be used for high-sensitivity downstream analysis, such as real-time PCR, clinical molecular diagnostics, gene expression analysis, gene analysis, forensics, infectious disease research, etc. Combined with other professional magnetic bead kits, it can be used for automated purification of proteins or peptide fragments, extraction and enrichment of specific bacteria, cells and various tumor markers, etc.



## Precise Control

The built-in engineering computer endows the system with the capability of operating independently without a PC, which saves more space and energy, and provides a highly stable automatic control system.



## Temperature Control

Temperature Control Users can define lysis and elution temperature according to experimental requirements.



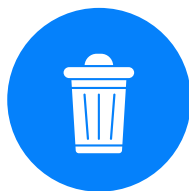
## User-defined Programming

Powerful programming functions support a more flexible and efficient program edition to meet different reagent requirements. USB disk guide/export program available.



## Stable Results

Avoid deviations and errors caused by manual operation, ensuring stable results and good repeatability.



## Contamination Control

Strictly control the contamination between the holes and batches, avoid cross-contamination.



## Flexible Compatibility

The system operation is flexible and open, compatible with a variety of nucleic acid extraction reagents.



## Safe and Stable

UV lights and negative pressure fans reduce air-solid pollution, safety doors can prevent operation errors, extract stably, and ensure safety.



## Fast Extraction

Automated operation, fast and efficient, 1-32 sample extraction can be completed as soon as 12 minutes.

## Product Parameters

Sample Flux	1-96
Processing Volume	50-1000 $\mu$ l
Recovery Rate of Magnetic Rods	>98%
Temperature Control Range	Room Temperature~120°C;
Operating Interface	10-inch LCD screen
Procedure Management	Add, Edit, Delete, Copy, Import, Export
External Interface	USB 2.0 Port, LAN Port
Contamination Control	Ultraviolet Disinfection
Power Conditions	AC220-240 V, 50/60 Hz, 400 VA
Product Size (Length $\times$ Width $\times$ Height)	730 mm $\times$ 547 mm $\times$ 605 mm
Weight	62 kg

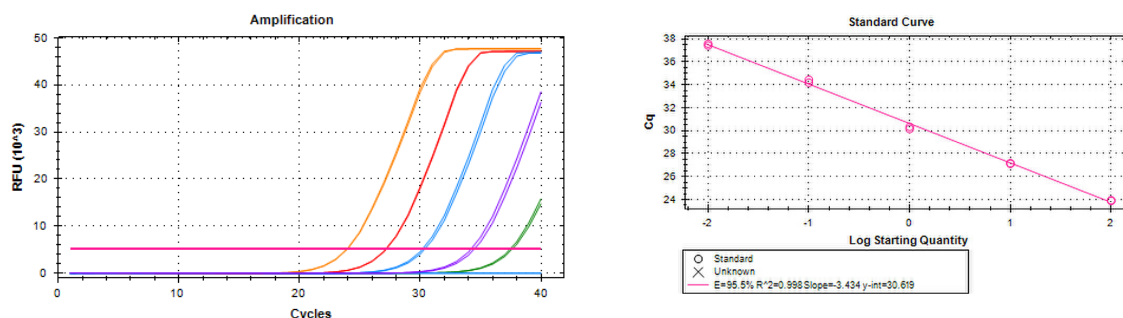
# MagicPure<sup>®</sup> Simple 96 Viral DNA/ RNA Kit

This kit utilizes a unique lysis buffer to lyse virus and release DNA / RNA. The released DNA / RNA are effectively purified after specifically binding to silica magnetic beads. It is suitable for isolating viral DNA/RNA from up to 200 µl of plasma, serum, whole blood, tissue homogenate, cell-free body fluid, nasopharyngeal or oropharyngeal aspirate/ wash, bronchoalveolar lavage fluid (BALF), tracheal aspirate, sputum, nasopharyngeal or oropharyngeal swab, and animal cell culture supernatant. The isolated DNA/ RNA with high purity can be applied in PCR, RT-PCR, qPCR, qRT-PCR, etc. This kit is compatible with 96-channel magnetic-rod automated nucleic acid extractor.

- Simple procedures; no centrifugation required
- No protease K is required; high purity
- Extract fast, 15 minutes can be completed

# 01

## Experimental results



The VVF6 quality control products diluted with  $10^1$ ,  $10^2$ ,  $10^3$ ,  $10^4$ , and  $10^5$  as the were used as templates. After extracting nucleic acids, qPCR detection (TransGen, AQ712) was performed. Results showed that the TransGen product extraction gradient concentration sample nucleic acid had a good linear relationship.

# MagicPure<sup>®</sup> 96 Blood Genomic DNA Kit

This kit utilizes an enzymatic lysis method to lyse blood and silica magnetic beads to specifically bind to DNA. The silica magnetic beads have a strong magnetic attraction for the targeted DNA in the buffer system. After the ionic strength is changed, the DNA will be released, resulting in rapid DNA extraction. This kit is suitable for the efficient isolation of genomic DNA from 50 µl to 250 µl of fresh, frozen blood or blood treated with anticoagulants. The isolated DNA can be applied in enzyme digestion, PCR, qPCR, Southern Blot, or other experiments. This kit is compatible with 96-channel magnetic-rod automated nucleic acid extractors.

- Simple procedures; no centrifugation required; high-speed extraction
- High yield; high purity

# 02

# MagicPure<sup>®</sup> 96 Buccal Swab Genomic DNA Kit

This kit utilizes a unique lysis buffer and Proteinase K to lyse cells from buccal swabs. The released DNA is effectively purified after specifically binding to magnetic beads. It is suitable for isolating gDNA from buccal swab samples (cotton swabs or nylon flocked swabs). The isolated genomic DNA can be used in PCR, qPCR, enzyme digestion, library preparation, or other experiments. This kit is compatible with 96-channel magnetic-rod automated nucleic acid extractor.

- Simple procedures; no centrifugation required; high-speed extraction
- High yield; high purity

# 03

# Other Extraction Kits with Magnetic Bead Methods

## 01

### **MagicPure<sup>®</sup> Cell-Free DNA Kit II**

This kit utilizes the enzymatic lysis method to lyse samples and silica magnetic beads to specifically bind to DNA, resulting in effectively purified cell-free circulating DNA. It is suitable for isolating and purifying high-quality cell-free circulating DNA from 0.5-10 ml of serum or plasma. The extracted DNA can be used for PCR, qPCR, Next Generation Sequencing or other experiments. This kit is compatible with a high-throughput magnetic-rod automated nucleic acid extractor.

- Simple procedures; no centrifugation required; high-speed extraction
- High yield; high purity

## 03

### **MagicPure<sup>®</sup> Mouse Tissue Genomic DNA Kit**

This kit is designed to extract DNA from mouse tissues (mouse ear, mouse tail, etc.) Unique lysis buffer is utilized to lyse solid or liquid samples rich in inhibitors and contaminants, and magnetic beads are used to specifically bind to DNA. The isolated DNA is suitable for routine molecular biology experiments, including PCR, qPCR, etc. This kit is compatible with a high-throughput magnetic-rod automated nucleic acid extractor.

- Fast extraction; high yield; high purity;
- High purity, special buffers optimized for mouse tail tissue samples, as well as efficient and special magnetic beads for DNA binding result in efficient elimination of inhibitors during downstream experiments.

## 05

### **MagicPure<sup>®</sup> Fungi Genomic DNA Kit**

This kit utilizes a unique lysis buffer to lyse fungal samples and release DNA, which is suitable for extracting genome DNA from a variety of fungi efficiently. The isolated DNA can be applied in various of routine experiments of molecular biology including enzyme digestion, PCR, Southern Blot, or other experiments. The entire process is safe and convenient. The extracted genome DNA has good integrity, high extraction yield, and high purity. This kit is compatible with a high-throughput magnetic-rod automated nucleic acid extractor.

- Simple procedures; high-speed extraction
- High yield; high purity

## 02

### **MagicPure<sup>®</sup> FFPE Tissue Genomic DNA Kit**

This kit is designed to extract DNA from formalin-fixed paraffin-embedded tissues. This kit utilizes the enzymatic lysis method to lyse cells and silica magnetic beads to specifically bind to DNA. It is suitable for isolating genomic DNA from paraffin-embedded tissues or paraffin sections. The extracted DNA can be used for PCR, qPCR, Next Generation Sequencing or other experiments. This kit is compatible with a high-throughput magnetic-rod automated nucleic acid extractor.

- Fast extraction; high yield; high purity;
- High purity, special optimized buffers for FFPE tissues samples, as well as special and efficient magnetic beads for DNA binding result in efficient elimination of inhibitors such as proteins, salts and so on.

## 04

### **MagicPure<sup>®</sup> Stool and Soil Genomic DNA Kit**

This kit is designed to isolate and purify DNA from stool or soil samples. Unique lysis buffer is utilized to lyse solid or liquid samples rich in inhibitors and contaminants, and magnetic beads are used to specifically bind to DNA. The isolated DNA is suitable for routine molecular biology experiments, including PCR, qPCR, and Next-Generation Sequencing. This kit is compatible with high-throughput magnetic-rod automated nucleic acid extractor.

- Fast extraction; high yield; high purity;
- High purity, special buffers optimized for stool and soil samples, as well as special magnetic beads for DNA binding result in efficient elimination of inhibitors included in stool and soil

## 06

### **MagicPure<sup>®</sup> Animal Cell Genomic DNA Kit**

This kit utilizes a unique lysis buffer to lyse animal cells and release DNA, which is suitable for extracting genome DNA from a variety of suspension animal cell samples efficiently. The isolated DNA can be applied in various of routine experiments of molecular biology including enzyme digestion, PCR, Southern Blot, or other experiments. This kit is compatible with a high-throughput magnetic-rod automated nucleic acid extractor.

- Simple procedures; high-speed extraction
- High yield; high purity

## TS-32 Automated Nucleic Acid Extractor Related Products

Product Name	Cat. No.	Specification
TS-32 Automated Nucleic Acid Extractor	TS-32	1
MagicPure® 32 Blood Genomic DNA Kit	EC101-32-01/11	32 rxns
	EC101-32-02/12	64 rxns
MagicPure® 32 Fungi Genomic DNA Kit	EC103-32-11	32 rxns
	EC103-32-12	64 rxns
MagicPure® 32 Viral DNA/RNA Kit	EC301-32-01/11	32 rxns
	EC301-32-02/12	64 rxns
MagicPure® Simple 32 Viral DNA/RNA Kit <a href="#">JHXB20210039</a>	EC311-32-11	32 rxns
	EC311-32-12	64 rxns
MagicPure® 32 Buccal Swab Genomic DNA Kit	EC901-32-01/11	32 rxns
	EC901-32-02/12	64 rxns

## TS-96 Automated Nucleic Acid Extractor Related Products

Product Name	Cat. No.	Specification
TS-96 Automated Nucleic Acid Extractor	TS-96	1
MagicPure® 96 Blood Genomic DNA Kit	EC101-96-01/11	96 rxns
MagicPure® 96 Viral DNA/RNA Kit	EC301-96-01/11	96 rxns
MagicPure® Simple 96 Viral DNA/RNA Kit <a href="#">JHXB20210038</a>	EC311-96-11	96 rxns
MagicPure® Fly 96 Viral DNA/RNA Kit <a href="#">JHXB20220076</a>	EC331-96-11	96 rxns
MagicPure® 96 Buccal Swab Genomic DNA Kit	EC901-96-01/11	96 rxns

## Other Magnetic Beads Nucleic Acid Extraction Products

Product Name	Cat. No.	Specification
MagicPure® Cell-Free DNA Kit II	EC211-01/11	50 rxns
MagicPure® FFPE Tissue Genomic DNA Kit	EC701-01	50 rxns
MagicPure® Stool and Soil Genomic DNA Kit	EC801-11	50 rxns
MagicPure® Mouse Tissue Genomic DNA Kit	EC111-11	50 rxns
MagicPure® Fungi Genomic DNA Kit	EC103-01/11	50 rxns
MagicPure® Animal Cell Genomic DNA Kit	EC104-01/11	50 rxns



# TRANSEN BIOTECH CO., LTD.

**Website** [www.transgenbiotech.com](http://www.transgenbiotech.com)

**Phone** +86-10-57815030

**Customer Service** +86-400-898-0321

**E-mail** [custserv@transgenbiotech.com](mailto:custserv@transgenbiotech.com)

**Complaints** +86-10-57815020

[complaints@transgen.com.cn](mailto:complaints@transgen.com.cn)

