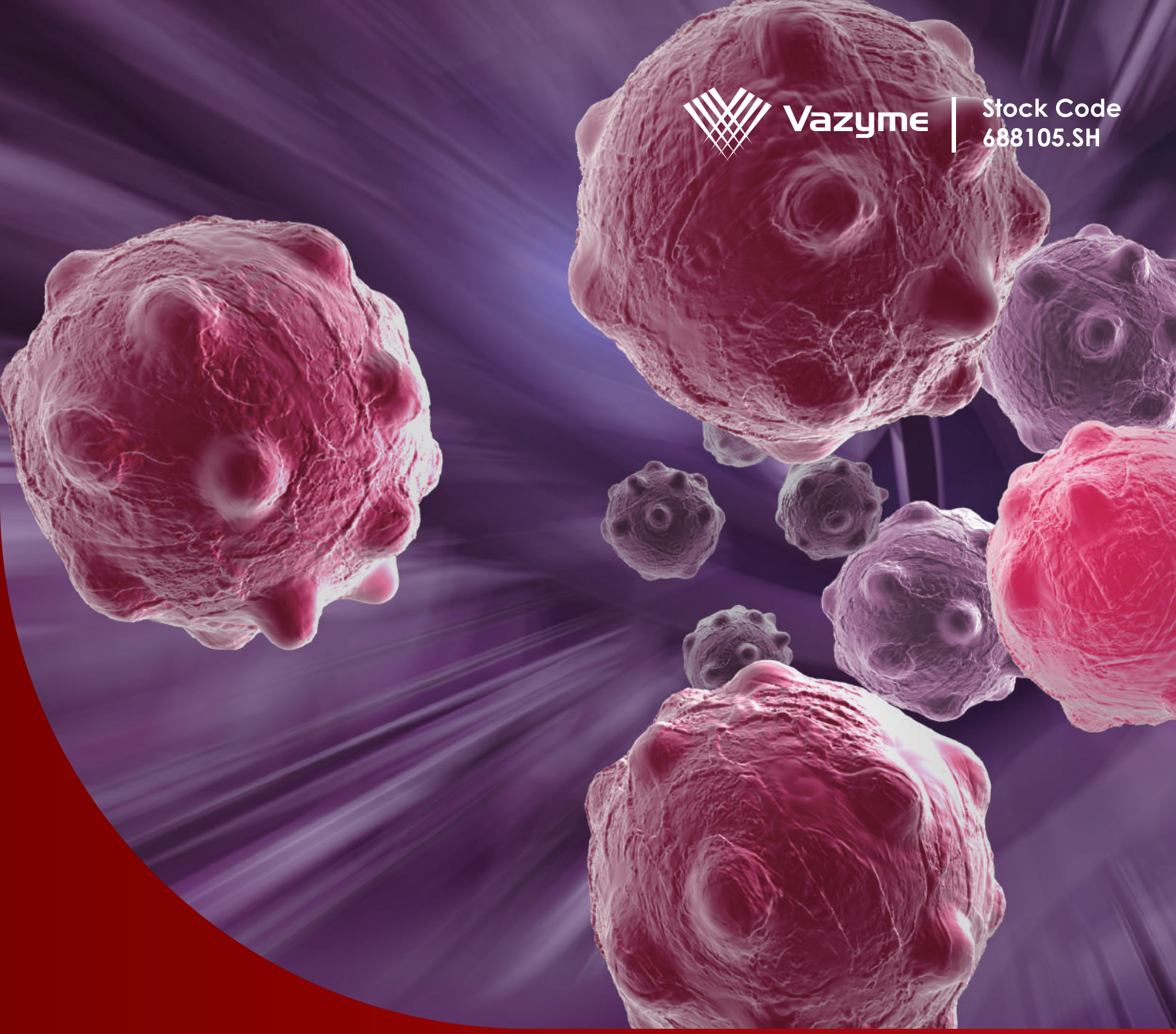


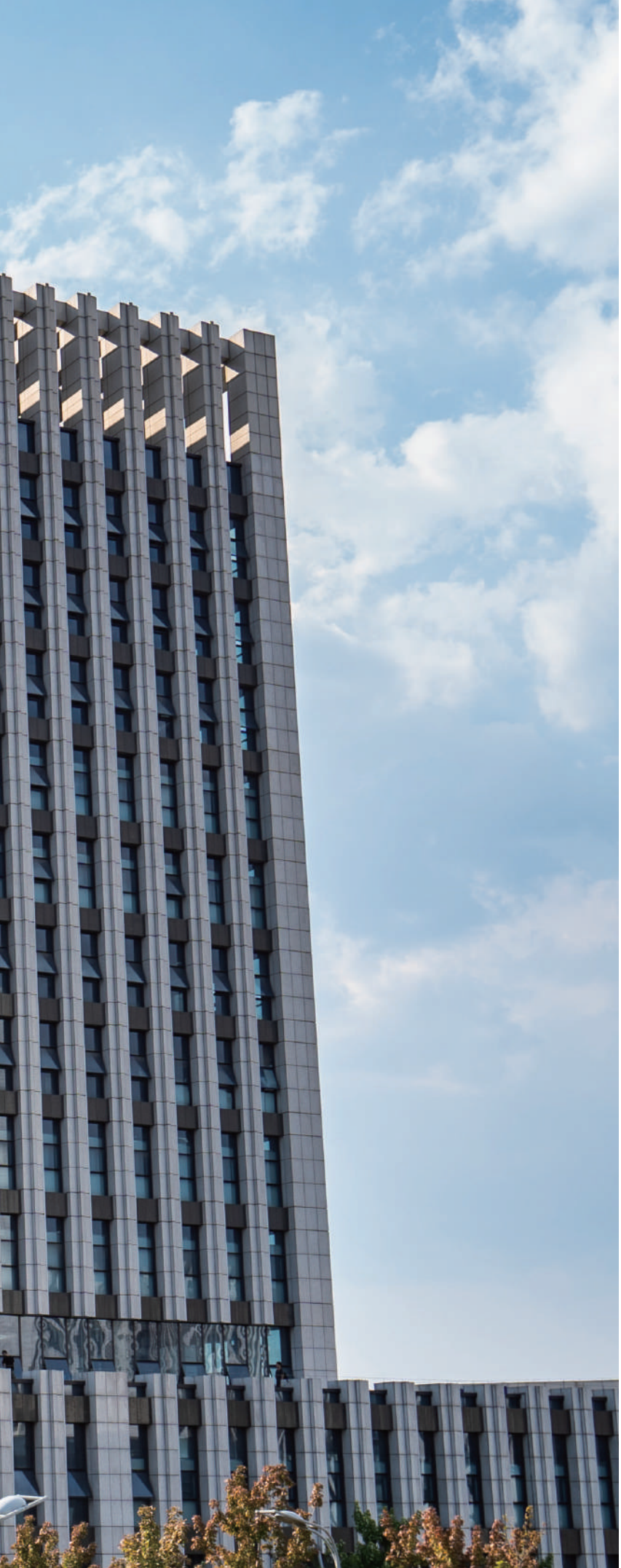
Vazyme | Stock Code 688105.SH

Reagents for

Nucleic Acid Extraction

Product Catalogue


Vazyme



About Us

Since the establishment in 2012, Vazyme has been dedicated to our mission "Science and Technology Make a Healthier Life" to focus on technology innovation and continuously expand the application fields of core technologies in life science, bio-medicine, and in vitro diagnostics.

As a R&D based company, we have been holding ourselves to the highest standards of ethics, accountability and professionalism. Our global research and development operations make sure we could provide quality products, solutions, and services locally to our customers, and more importantly, to do as much as it can to meet the unmet customers' needs. For now, we are present in more than 60 countries and regions worldwide to get close to local customers.

Innovation is our DNA

700+ Researchers

46% of them have master's degree or above. Our 4000+ employees make up global research and development operations with scientists, experts, bio-technicians, and engineers.

$103 Million R&D Investment

As an innovator in technology, we see the continuous investment in the R&D of innovative solutions as a top priority.

2000+ Papers

have been published cited our products in top academic journals worldwide, including more than 270 in CNS (stands for Cell, Nature, Science) and its sub-journals, as of Q2 2022.

Professional Supplier in Life Science

We own 30+ product lines through our self-developed key technology platforms. We develop 500+ reagents and solutions, and 1000+ customized products to meet the personalized and diversified needs of customers.

Molecular Biology Research Reagents

Molecular Diagnostics Solutions

NGS Library Prep Kits

Robust and Reliable Supply Chain

We are a R&D-focused innovative biotechnology company with both capabilities in developing upstream technologies in-house and manufacturing end products.

Reagents and Solutions

70+

Automatic Reagent Filling Lines

Raw Materials

Ton Class

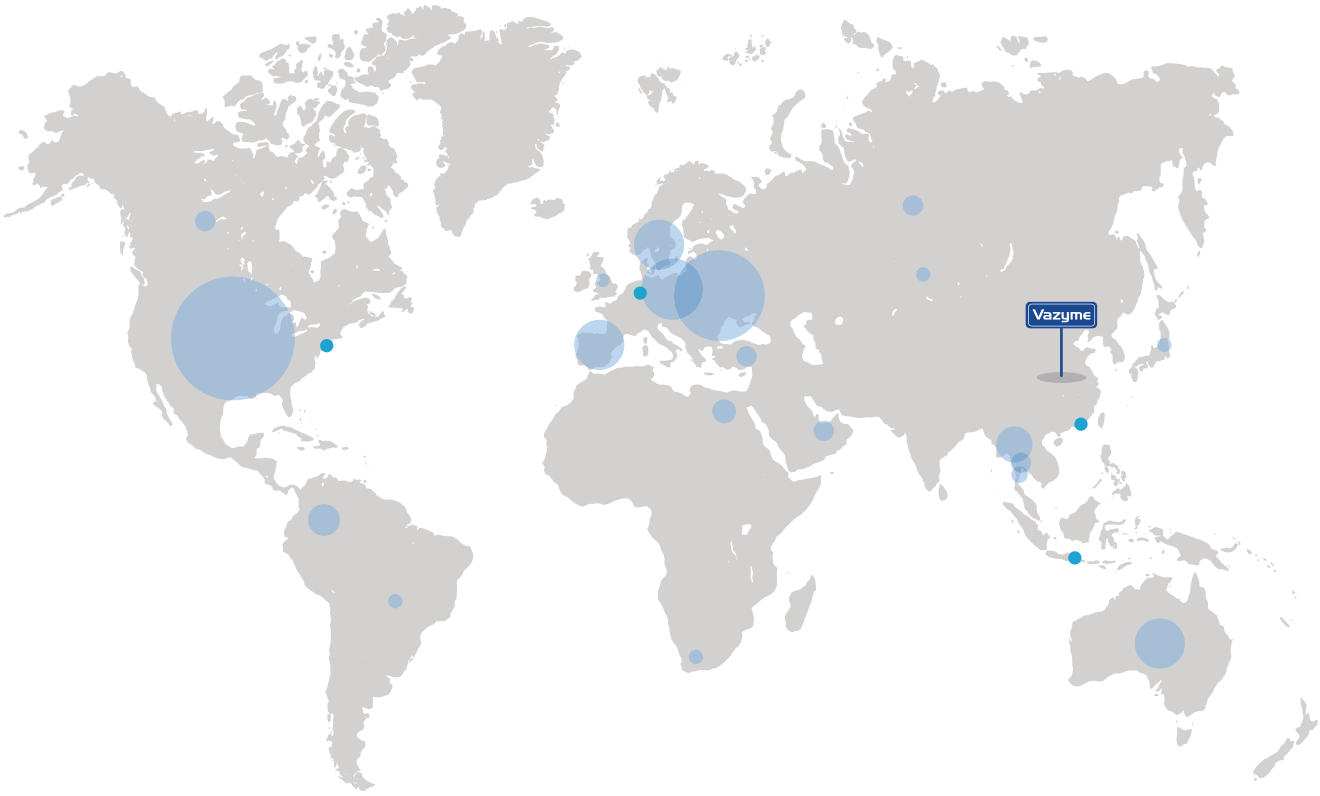
High-Density Fermentors

QC Management

We persevere that creating value for customers is the key to our business. That's why we are pursuing the highest standards in quality of products.

Global Network

In more than 60 countries and regions worldwide that's where we are present, making sure we are close to our customers to provide our products, solutions, and services locally. We have four branches in the United States, Germany, Indonesia and Hong Kong SAR of China and multiple overseas warehouses to ensure the worldwide logistics.



*Above is only part of countries and regions.

Vazyme

For Science For Health

Content

DNA Extraction

Introduction

The first isolation of DNA was done in 1869 by Friedrich Miescher[1]. Currently it is a routine procedure in molecular biology. Our purification methods are based on spin columns and magnetic beads. The quality of DNA is critical to the success of subsequent downstream molecular applications. To meet different needs, we offer DNA extraction, DNA purification, and DNA crude lysis products for the simple and rapid recovery of high quality DNA from diverse samples.

Common Extraction Procedure

There are five basic steps of DNA extraction

1)Lyse samples to disrupt the cellular structure and release the DNA.

2)Separate the DNA from proteins, cell debris and other material.

3)Bind the DNA.

4)Wash proteins and other impurities away.

5)Elute the DNA.

Selection Guide

Method	Sample Types	Time	Final Product	Product Name	Cat.No.#
Spin Column	• Blood • Cell • Tissue • Bacteria	~ 30 min	gDNA	FastPure Blood/Cell/Tissue/Bacteria DNA Isolation Mini Kit	DC112-01/02
	• Plant	30 min		FastPure Plant DNA Isolation Mini Kit	DC104-01
	• Bacterial • Cultures	30 min	Plasmid DNA	FastPure Plasmid Mini Kit	DC201-01
		45 min		FastPure Plasmid Giga Kit	DC205-01
	• Gel • PCR Products	10 - 15 min	Recovered DNA	FastPure Gel DNA Extraction Mini Kit	DC301-01
Magenetic Beads	• Whole Blood	40 min	gDNA	VAMNE MagUltra Blood Genomic DNA Extraction Kit	DM101-01/02
		48 min		Magnetic Blood DNA Extraction Kit (Prepackaged)	DM102-01
	• Plasma • Serum • Urine	45 - 70 min	Cell-free DNA	VAMNE MagUltra Circulating Cell-free DNA Isolation Kit	N913-01/02

Reference

1.Dahm R. (2008). Discovering DNA: Friedrich Miescher and the early years of nucleic acid research. *Human genetics, 122*(6), 565–581.

FastPure Blood/Cell/Tissue/Bacteria DNA Isolation Mini Kit

Features

- High quality and integrity
- Suitable for direct DNA extraction from a variety of fresh or frozen anticoagulant, cell, animal tissue and bacterial samples
- Animal tissue offers a 30-minute fast extraction protocol

Product Description

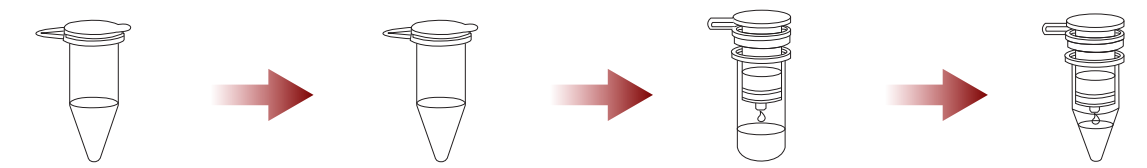
FastPure Blood/Cell/Tissue/Bacteria DNA Isolation Mini Kit is a DNA extraction kit with wide compatibility and high yields. The kit uses the novel specific silica gel membrane adsorption column and fully upgraded optimal lysis buffer, which can efficiently extract DNA from fresh or frozen anticoagulated blood, cells, animal tissues and bacteria samples. It eliminates the need to use toxic reagents such as phenol chloroform, or time-consuming alcohol precipitation during the extraction process, and maximizes the removal of RNA, proteins, lipids and other inhibitory impurities. The extracted DNA, with high purity and high yields, is widely used in various downstream experiments, including enzyme digestion, PCR, and Southern blot.

Product Name	Size	Cat.No.
FastPure Blood/Cell/Tissue/ Bacteria DNA Isolation Mini Kit	50 rxns	DC112-01
	200 rxns	DC112-02

Sample Type

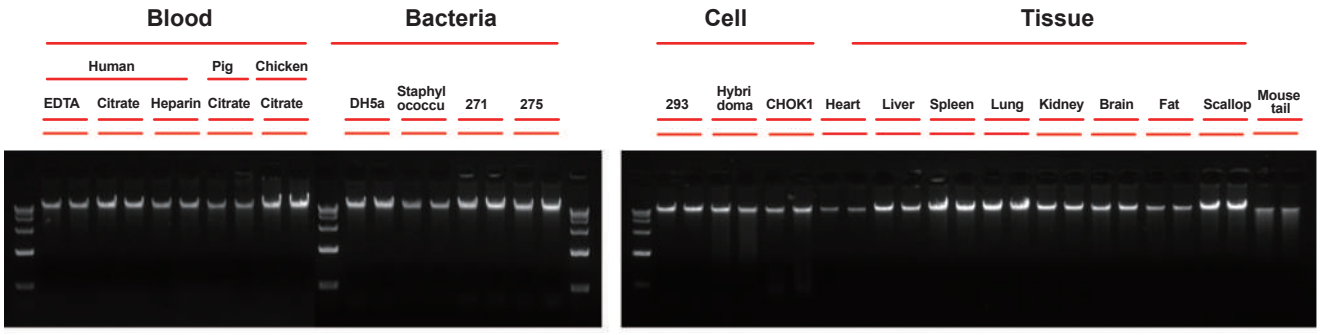
- Fresh or frozen anticoagulated whole blood with non-nucleated erythrocyte (≤200 µl)
- Fresh or frozen anticoagulated whole blood with nucleated erythrocyte (5 - 20 µl)
- Cultured cells (<5 × 10^6)
- Animal tissues (<25 mg)
- Bacteria (<3 × 10^9)

Workflow



Wide Sample Applicability

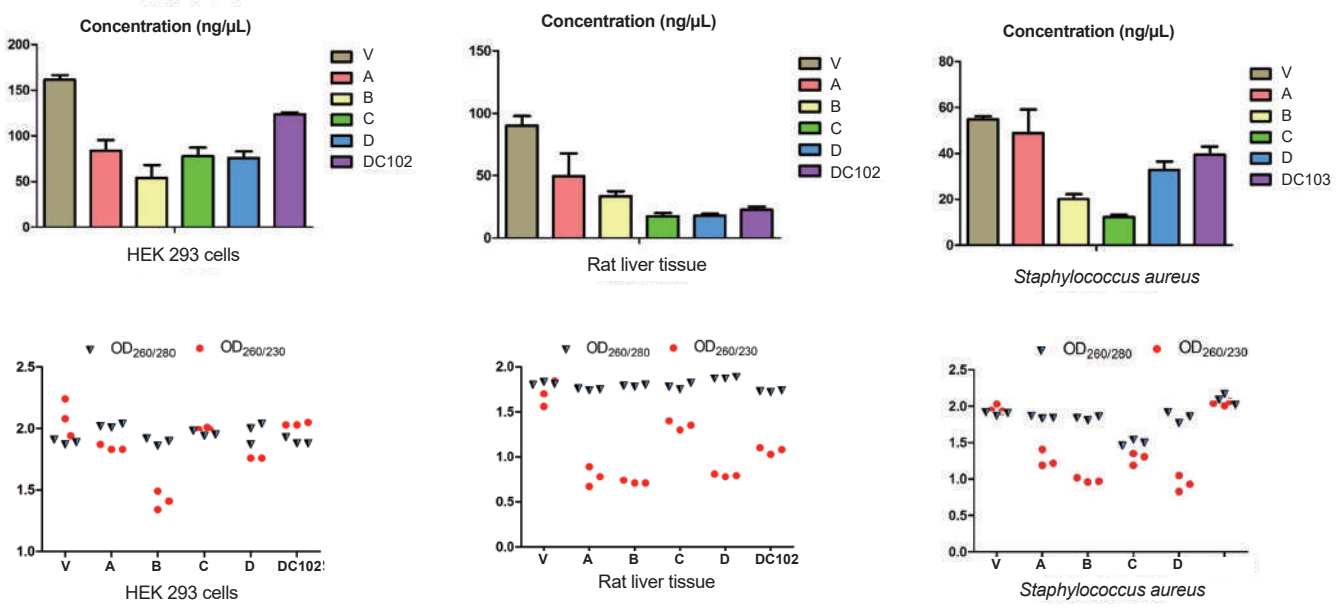
Vazyme #DC112 was used for the DNA extraction and purification of the following 21 samples. And the final DNA product was detected by agarose gel electrophoresis. The elution volume was 100 μl, and 1% agarose gel electrophoresis was run with a sample volume of 160 - 180 ng. Results show that the kit is widely compatible with sample types and purifies high quality genomic DNA from different species.



Loading amount 160–180 ng, 1% agarose gel, Maker DL15000

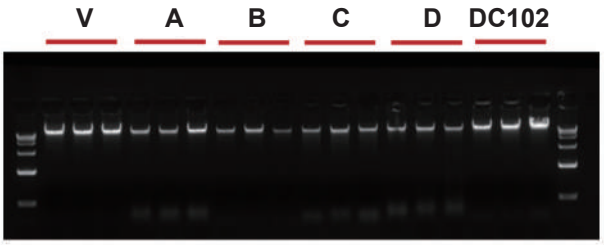
High DNA Yields and Purity

Genomic DNA was extracted from HEK 293 cells, rat liver tissue, and *Staphylococcus aureus* with Vazyme #DC112 ("V" in the figures), products of Suppliers A, B, C, and D, and similar products of Vazyme. The obtained DNA was detected for concentration and purity. It can be seen from the figures that for each sample type, Vazyme #DC112 extracts genomic DNA with a higher yield than the other similar products, and the $OD_{260/280}$ and $OD_{260/230}$ ratios are closer to the standard values, indicating better DNA purity.

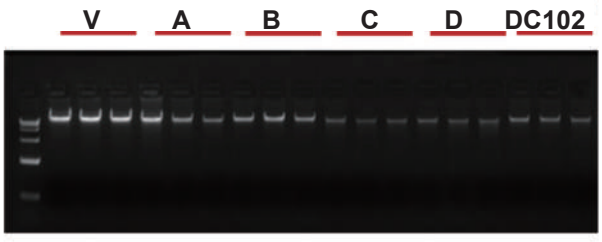


High Integrity

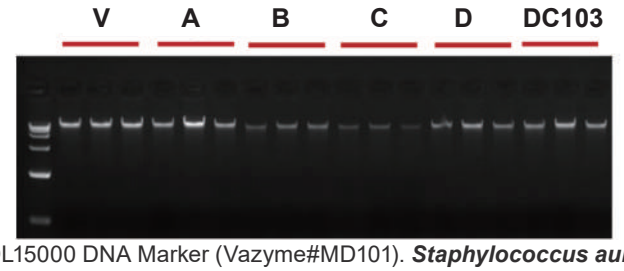
Genomic DNA was extracted from HEK 293 cells, rat liver tissue, and *S. aureus* with Vazyme #DC112 ("V" in the figures), products of Suppliers A, B, C, and D, and similar products of Vazyme. Then 1% agarose gel electrophoresis was run for the DNA. The figures show that the DNA extracted using Vazyme #DC112 is intact, with a high yields and purity.



M: DL15000 DNA Marker (Vazyme #MD101). **HEK 293 cells**, about 2.5 × 10^6, elution volume 100 μL, loading volume 1 μL.



M: DL15000 DNA Marker (Vazyme#MD101). **Rat liver tissue**, about 10mg, elution volume 100 μL.



M: DL15000 DNA Marker (Vazyme#MD101). ***Staphylococcus aureus*** (OD_{600}=0.5, 1 ml), elution volume 100 μL, loading volume 1 μL.

FastPure Plant DNA Isolation Mini Kit

Features

- Extract genomic DNA from plant samples within 30 min
- Suitable for DNA extraction from common plants and polysaccharide- and polyphenol-rich plants

Product Description

Plants contain significant quantities of polysaccharides, carbohydrates, phenolics, and other compounds, which negatively impact downstream applications. FastPure Plant DNA Isolation Mini Kit uses silica membranes for purification and unique solution system to solve this difficulty. In addition, proteins and other organic compound impurities in plant cells can be removed to a great extent. The extracted genomic DNA from fresh and dried samples of common plants or polysaccharide- and polyphenol-rich plants, has good purity and stable quality.

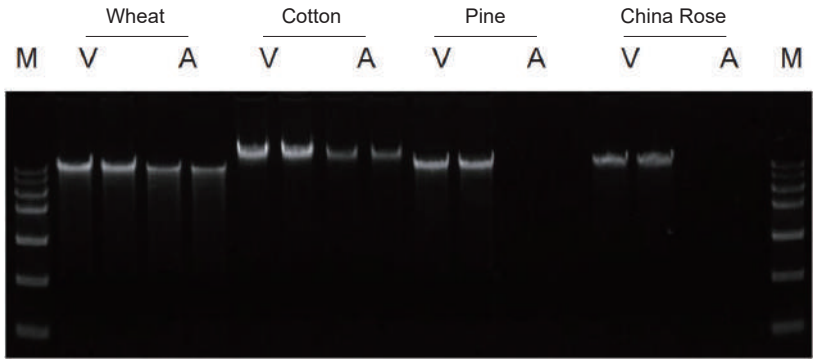
Product Name	Size	Cat.No.
FastPure Plant DNA Isolation Mini Kit	50 rxns	DC104-01

Validated Samples

Source		Amount (mg)	DNA (μg)
Root	*Solanum tuberosum* (potato)	50	0.15 - 0.3
	Ipomoea batatas (sweet potato)	50	0.3 - 0.5
	Oryza sativa (rice)	50	0.5 - 1.5
Leaf	*Triticum aestivum* (wheat)	50	3.0 - 6.0
	Oryza sativa (rice)	50	1.5 - 2.5
	Zea mays (maize)	50	1.5 - 2.5
	Arabidopsis thaliana (thale cress)	50	0.5 - 1.0
	Nicotiana tabacum (tobacco)	50	1.0 - 2.0
	Glycine max (soybean)	50	0.1 - 0.25
Pulp/Peel	*Lycopersicon esculentum* (tomato)	50	0.1 - 0.25
	Vitis spp. (green grape)	50	0.01 - 0.02
	Musa nana (banana)	50	0.02 - 0.06
Seed	*Fagopyrum esculentum* (buckwheat)	20	0.3 - 0.5
	Arachis hypogaea (peanut)	50	1.7 - 2.5

High Quality and Integrity

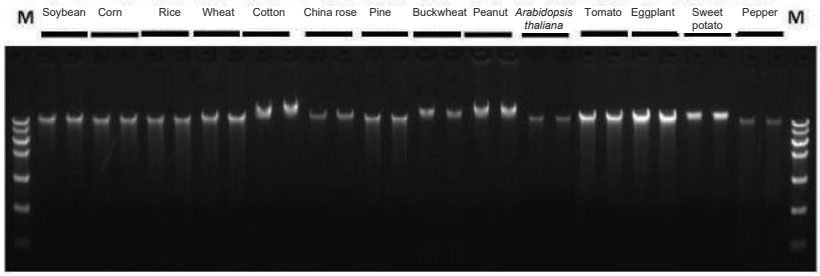
Genomic DNA was extracted from wheat, cotton, pine and China rose with Vazyme #DC104 and a similar product of Supplier A. The integrity was analyzed by 0.8% agarose gel electrophoresis.



M: DL15000 DNA Marker (Vazyme #MD103)

Wide Compatibility

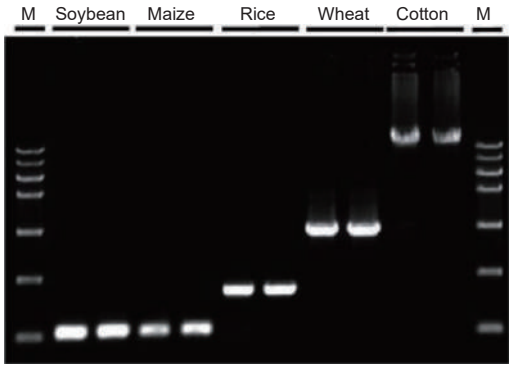
Genomic DNA was extracted from 14 types of plants with Vazyme #DC104. As shown in the following figure, Vazyme #DC104 is well compatible with diverse plant samples.



M: DL15000 DNA Marker (Vazyme #MD103)

Downstream Applications

PCR reactions were performed using plant genomic DNA of different species extracted using FastPure Plant DNA Isolation Mini Kit (Vazyme #DC104).



FastPure Plasmid Mini Kit

Features

- **Fast and Easy:** No need for column equilibration; simple and fast extraction from multiple samples within 30 min
- **High Purity:** Extracted pure palsmid DNA that can be used in most molecular applications (sequencing, cloning, PCR)
- **High Yields:** Each column adsorbs up to 35 μg of plasmid DNA

Product Description

FastPure Plasmid Mini Kit purifies 1 - 5 ml of cultured bacteria and lyses the cells by an optimized SDS-alkaline method. The kit utilizes a silica-based membrane technology in the form of a convenient spin column, and binds plasmid DNA in a highly efficient manner under high-salt and low-pH conditions and largely remove proteins, genomic DNA, RNA, and other impurities. In the end, pure plasmid DNA is eluted from the silica membrane with a lowsalt, high-pH elution buffer. The kit recovers up to 35 μg of high-copy plasmid DNA per isolation procedure.The purified plasmid DNA is ready for use in biological experiments such as enzyme digestion, PCR, sequencing, ligation, transformation, and transfection of common passage cells.

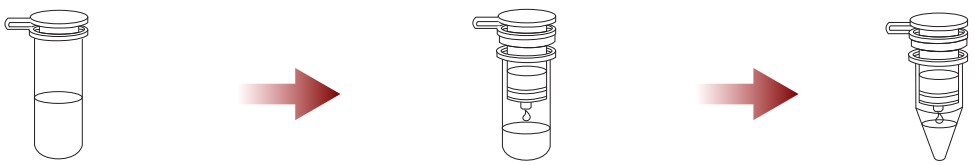
Product Name	Size	Cat.No.
FastPure Plasmid Mini Kit	100 rxns	DC201-01

Sample Type

This product is intended for 1 - 5 ml of overnight bacterial cultures.

When preparing plasmids of a low copy number, scale up the volumes of Buffer P1, Buffer P2, and Buffer P3, and the volume of bacterial cell solution can be increased to 5 - 10 ml.

Workflow



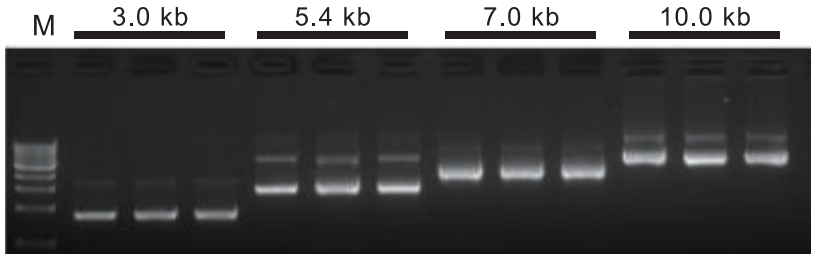
Resuspend, lyse and neutralize

Bind plasmid DNA and wash

Eltue

High Yields

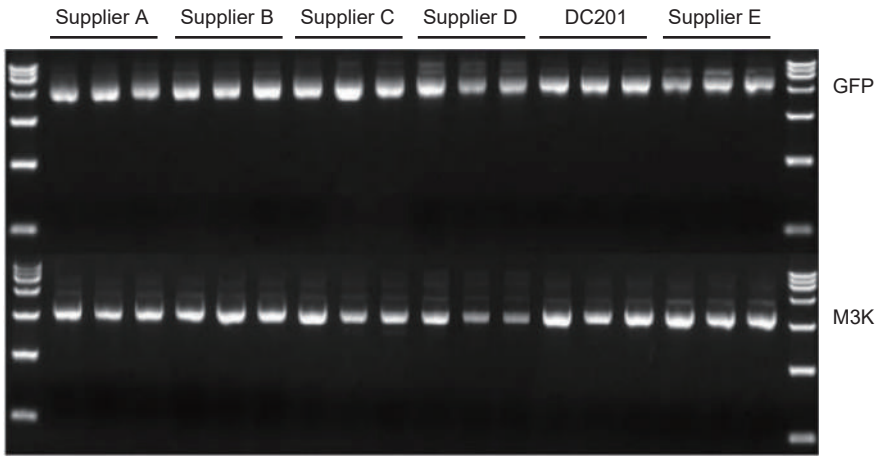
The FastPure Plasmid Mini Kit was used to extract plasmids of 3.0 kb, 5.4 kb, 7.0 kb, and 10.0 kb, respectively, and the extraction products were analyzed by agarose gel electrophoresis. Results show that the kit performs well and gives high yields for plasmids of various sizes.



M: 1 kb DNA Ladder (Vazyme #MD105)

High Integrity

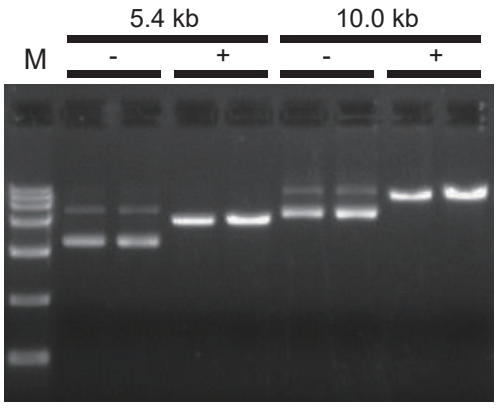
GFP plasmid and M3K plasmid transfered to *E. coli* was purified by Vazyme #DC201 and similar products (Suppliers A, B, C, D and E). Plasmid DNA integrity and RNA residue were tested by 1.0% agarose gel electrophoresis. As shown in the figure, Vazyme #DC201 is equivalent to suppliers A - E. Under the same conditions, there is no RNA residue.



M: DL15000 DNA Marker (Vazyme #MD103)

Downstream Applications

The above plasmids extracted of 5.4 kb and 10.0 kb were for single-enzyme digestion and analyzed by agarose gel electrophoresis. The results demonstrate that the extracted plasmid DNA is of high purity and does not inhibit downstream reactions.



M: DL15000 DNA Marker (Vazyme #MD103)

FastPure Gel DNA Extraction Mini Kit

Features

- Process sample with one spin column in 10 - 15 min
- Applicable to PCR cleanup and gel extraction
- Recovery efficiency is up to 80%
- The recovered fragment of DNA is 70 bp - 20 kb

Product Description

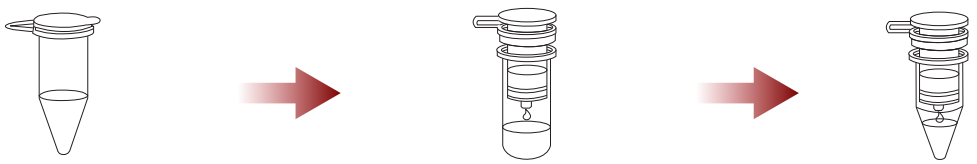
FastPure Gel DNA Extraction Mini Kit uses an optimized buffer system and silica column purification technology to recover DNA fragments of 70 bp - 20 kb from various concentrations of TAE or TBE agarose gels. After the gel is dissolved and added to the spin column, DNA can be specifically adsorbed by centrifugation under a high-salt condition, with other impurities removed simultaneously. The kit can also purify DNA fragments directly from PCR products, enzymatic reaction systems, or crude DNA products obtained by other means, while removing impurities such as proteins, organic compounds, inorganic salt ions, and oligonucleotide primers. The entire procedure takes only 10 - 15 min, and the purified DNA is ready for use in molecular biology applications such as ligation, transformation, enzyme digestion, *in vitro* transcription, PCR, sequencing, and microinjection.

Product Name	Size	Cat.No.
FastPure Gel DNA Extraction Mini Kit	100 rxns	DC301-01

Sample Type

The kit applies to various concentrations of TAE or TBE agarose gel and is intended for recovery from PCR products, enzymatic reaction systems, and crude DNA obtained by other means.

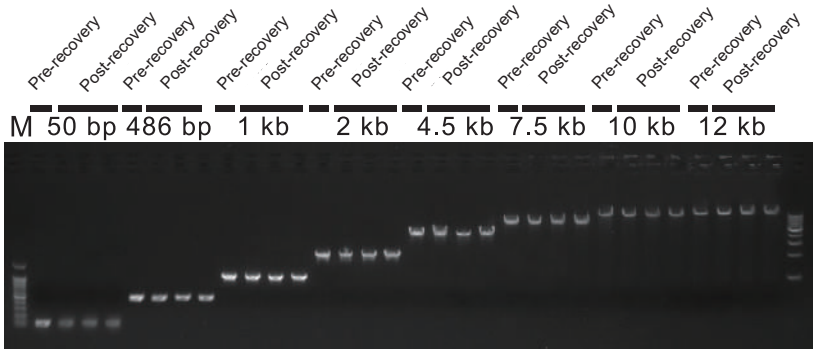
Workflow



PCR reaction mix or dissolved gel → Bind and wash → Eltue

High Recovery Efficiency

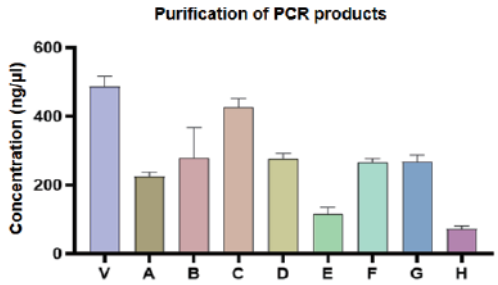
PCR products of 50 bp, 486 bp, 1 kb, 2 kb, 4.5 kb, 7.5 kb, 10 kb, and 12 kb are purified, respectively, and both the pre-recovery and post-recovery DNA fragments were analyzed by agarose gel electrophoresis. Results show that the kit delivers good recovery in the fragment range of 50 bp - 12 kb.

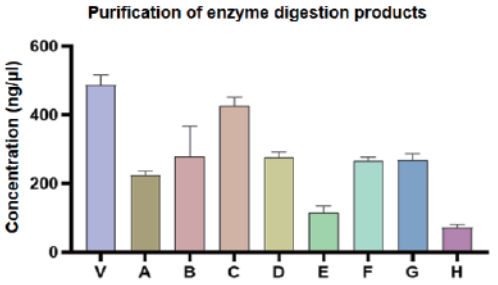


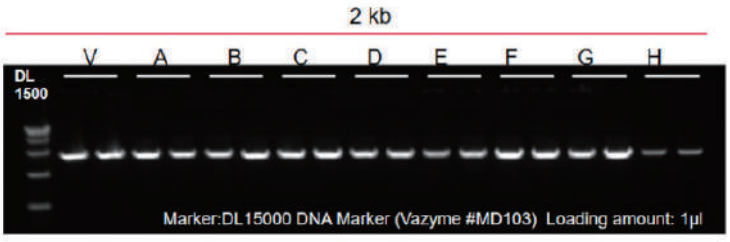
M:1 kb DNA Ladder (Vazyme #MD105)

Higher Yields

Vazyme #DC301 and commercially available products (A, B, C, D, E, F, G, H) were used to purify and recover PCR products (500 bp) and enzyme digestion products (2 kb) according to their respective procedures, and the concentration and glue running of purified and recovered products were detected. The results show that the purification effect of Vazyme #DC301 is superior to other products.







FastPure Gel DNA Extraction Mini Kit

Features

- **Flexible input amounts:** Starting volumes is ranging from 200 µl to 10 ml
- **Wide compatibility:** Plasma samples derived from most blood collection tube types are compatible, including Streck Cell-Free DNA BCT

Background

Since its discovery in human blood plasma about 70 years ago, circulating cell-free DNA (cfDNA) has become an attractive subject of research as noninvasive disease biomarker[1].

cfDNA refers to all non-encapsulated DNA present in the blood stream which may originate from apoptotic cells as a part of the physiological cell turnover, or from cancer cells or fetal cells[2]. cfDNA testing is a laboratory method that involves analysing free (i.e. non-cellular) DNA contained in biological samples, and is most commonly used to look for genomic variants associated with hereditary or genetic diseases. For example, prenatal cell-free DNA testing is a non-invasive method used during pregnancy that examines the fetal DNA that is naturally present in the maternal bloodstream, and checks this DNA to find out if the baby is more likely to have Down syndrome or another disorder caused by a trisomy[3].

cfDNA and the tumour-derived DNA fraction, circulating tumour DNA (ctDNA), is also used for the detection and characterization of some cancers and to monitor cancer therapy[4]. cfDNA has already had a huge impact on prenatal medicine and oncology. And in the future it could become the standard of care in other fields, such as transplant medicine and cardiovascular disease[2].

Product Description

VAMNE MagUltra Circulating Cell-free DNA Isolation Kit is based on paramagnetic particle purification technology, and designed for extraction of high-quality circulating cell-free DNA (cfDNA) from 0.2-10 ml of serum and plasma, 2-10 ml urine and other cell-free samples. This kit is optimized for isolation of low molecular weight nucleic acid, ensuring high recovery rate of high quality cfDNA. The procedure is easy and fast, and the obtained cfDNA can be directly used in qPCR, NGS and other conventional experiments. This kit also can be processed with automated nucleic acid extraction instruments for quickly large-scale extraction, which can greatly reducing the workload of the operator.

Product Name	Size	Cat.No.
VAMNE MagUltra Circulating Cell-free DNA Isolation Kit	50 rxns	N913-01
	100 rxns	N913-02

Sample Type

Plasma, serum, urine and other cell-free samples.

Workflow

Reference

1.Nandi, K., Verma, R., Dawar, R., & Goswami, B. (2020). Cell free DNA: revolution in molecular diagnostics - the journey so far. *Hormone molecular biology and clinical investigation,41*(1), 2020.41.

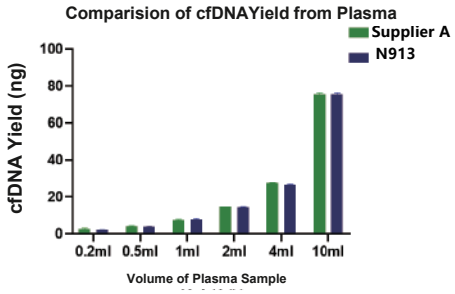
2.Ranucci R. (2019). Cell-Free DNA: Applications in Different Diseases. Methods in molecular biology (Clifton, N.J.),1909, 3–12.

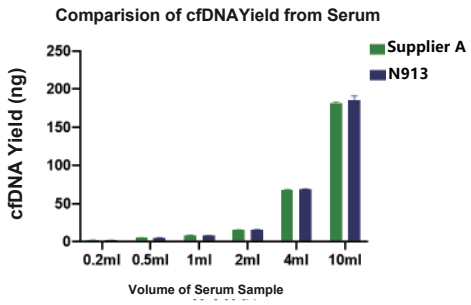
3.Drury, S., Hill, M., & Chitty, L. S. (2016). Cell-Free Fetal DNA Testing for Prenatal Diagnosis. *Advances in clinical chemistry,76,* 1–35.

4.Cisneros-Villanueva, M., Hidalgo-Pérez, L., Rios-Romero, M., Cedro-Tanda, A., Ruiz-Villavicencio, C. A., Page, K., Hastings, R., Fernandez-Garcia, D., Allsopp, R., Fonseca-Montaño, M. A., Jimenez-Morales, S., Padilla-Palma, V., Shaw, J. A., & Hidalgo-Miranda, A. (2022). Cell-free DNA analysis in current cancer clinical trials: a review. *British journal of cancer, 126*(3), 391–400.

Flexible Input Amounts

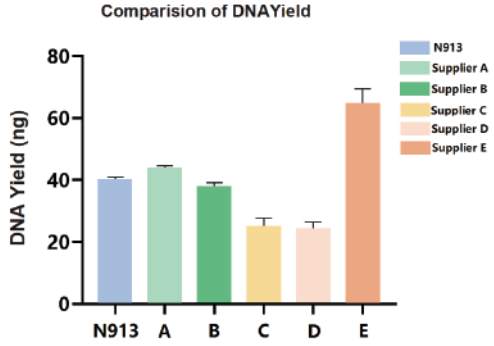
The above plasmids extracted of 5.4 kb and 10.0 kb were for single-enzyme digestion and analyzed by agarose gel electrophoresis. The results demonstrate that the extracted plasmid DNA is of high purity and does not inhibit downstream reactions.



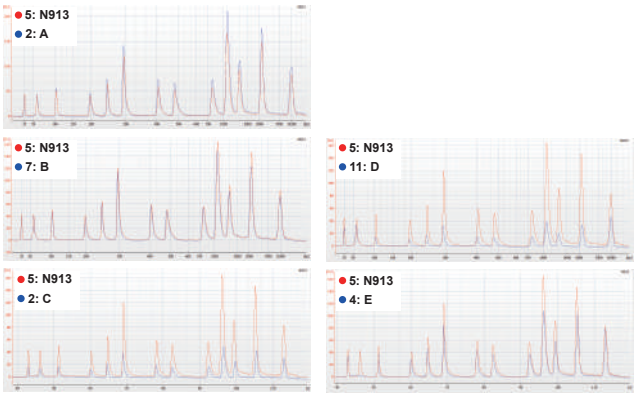


High Quality

50-5000 bp DNA marker was extracted according to the corresponding instruction from Vazyme #N913, supplier A, supplier B, supplier C, supplier D and supplier E. DNA yields were calculated from the resulting concentration using Qubit. As can be seen in the data, Vazyme #N913 has slightly lower DNA yields than supplier A, and higher than other suppliers. Due to the added Carrier RNA, the concentration of supplier E was falsely high, which can be confirmed by 2100 Bioanalyzer.



The 2100 Bioanalyzer system displayed 13 prominent peaks. Compared with supplier A-D, Vazyme #N913 has similar performance with supplier A and B, and better than supplier C-E.



RNA Extraction

Introduction

Ribonucleic acid (RNA) is a single strand transcribed from a template DNA strand via complementary base pairing. It exists in different forms and length, and has numerous functions. Of the many types of RNA, the three most well-known and most commonly studied are messenger RNA (mRNA), transfer RNA (tRNA), and ribosomal RNA (rRNA), which are present in all organisms. In eukaryotes, messenger RNA (mRNA) is a form of coding RNA that is transcribed from genes and serves as template for translation into proteins[1]. Ribosomes, the sites of protein translation in the cytoplasm, are composed of rRNA and protein. The ribosome protein subunits are encoded by rRNA and are synthesized in the nucleolus. tRNA brings the specified amino acids to the ribosomes, where they are linked to form proteins[2]. RNA also can be divided into coding (cRNA) and noncoding RNA (ncRNA). According to their size, ncRNA can be futher classified to long ncRNAs (lncRNA, > 200 nucleotides) and small ncRNAs (< 200 nucleotides).

Common Extraction Method

RNA extraction and isolation is a a key step in many biological assays. RNA can be purified by mainly three methods: organic reagents (acid guanidinium thiocyanate-phenol-chloroform), silica-based spin columns and magnetic beads. Organic extraction yields RNA with full length and has low cost and wide adaptability to diverse samples. But the procedure needs high toxic reagents and longer operation time. Silica-based nucleic acid extraction is easy to use and save time. The spin column preferentially capture nucleic acids longer than 200 nucleotides but provide poor recovery of short RNA because short RNA tightly bind with silica and are less likely to elute[3].

Selection Guide

Method	Sample Types	Time	Final Product	Product Name	Cat.No.#
Spin Column	• Tissue • Cell • Plant • Fungi • Bacteria • Biological fluid	1 h	Total RNA	FreeZol Reagent	R711-01/02
				VeZol Reagent	R411-01/02
	• Plant	11 min		FastPure Universal Plant Total RNA Isolation Kit	RC411-01
	• Tissue • Cell	6 min		FastPure Cell/Tissue Total RNA Isolation Kit V2	RC112-01

Reference

1.Roszkowski, M., & Mansuy, I. M. (2021). High Efficiency RNA Extraction From Sperm Cells Using Guanidinium Thiocyanate Supplemented With Tris(2-Carboxyethyl)Phosphine. *Frontiers in cell and developmental biology, 9*, 648274.

2.Wan, Y. and Chatterjee, . Kunal (2023, May 18).*RNA.Encyclopedia Britannica.*

3.Ali, N., Rampazzo, R. C. P., Costa, A. D. T., & Krieger, M. A. (2017). Current Nucleic Acid Extraction Methods and Their Implications to Point-of-Care Diagnostics. *BioMed research international, 2017*, 9306564.

FreeZol Reagent

Features

- Operating at room temperature without the use of a refrigerated centrifuge
- No need for toxic and harmful reagents such as chloroform and β-mercaptoethanol
- Suitable for various animal, plant, and microbial samples, easily applicable to all kinds of cultured cells

Product Description

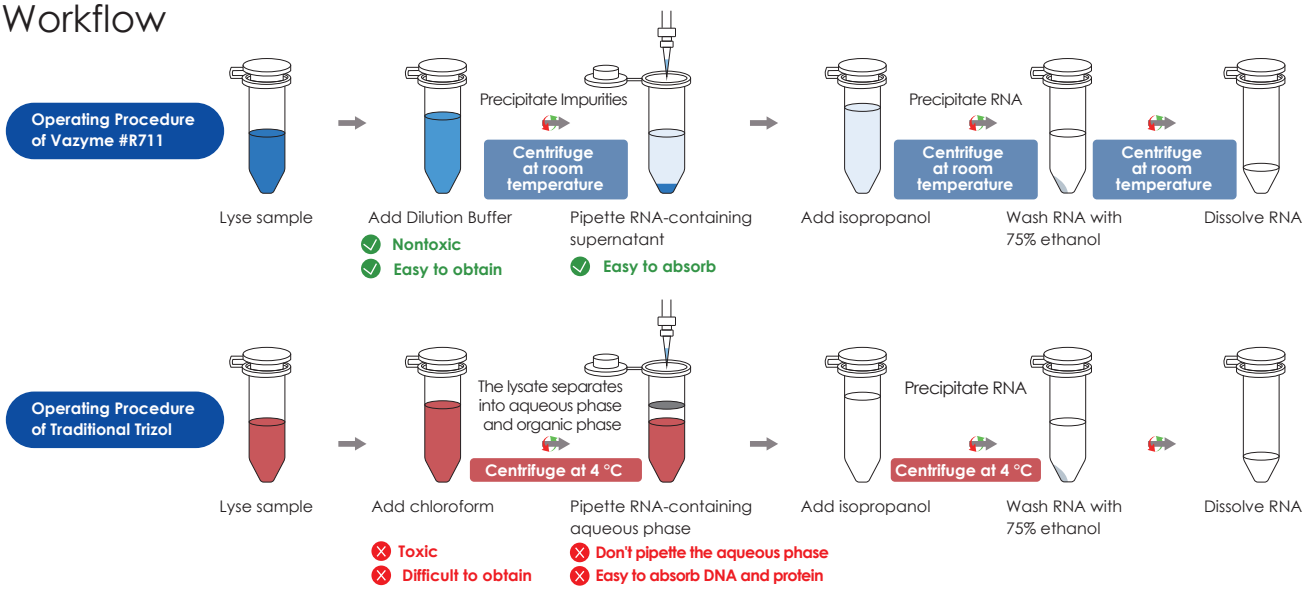
FreeZol Reagent is widely applicable to the extraction of total RNA from cultured cells, animal tissues, and simple plant tissues. Compared with the conventional Trizol method, this product features a simple procedure that can be performed at room temperature with no need to use chloroform for phase separation. In addition, this product ensures the integrity and purity of the extracted RNA by precipitating proteins, DNA, polysaccharides and other impurities in the organic phase while retaining RNA in the upper aqueous phase. The whole procedure can be completed in 1 h. The obtained total RNA can be used directly for RT-PCR, qRT-PCR, Northern blot, Dot blot, *in vitro* translation, NGS, and other molecular biology experiments.

Product Name	Size	Cat.No.
FreeZol Reagent	200 rxns	R711-01
	400 rxns	R711-02

Sample Type

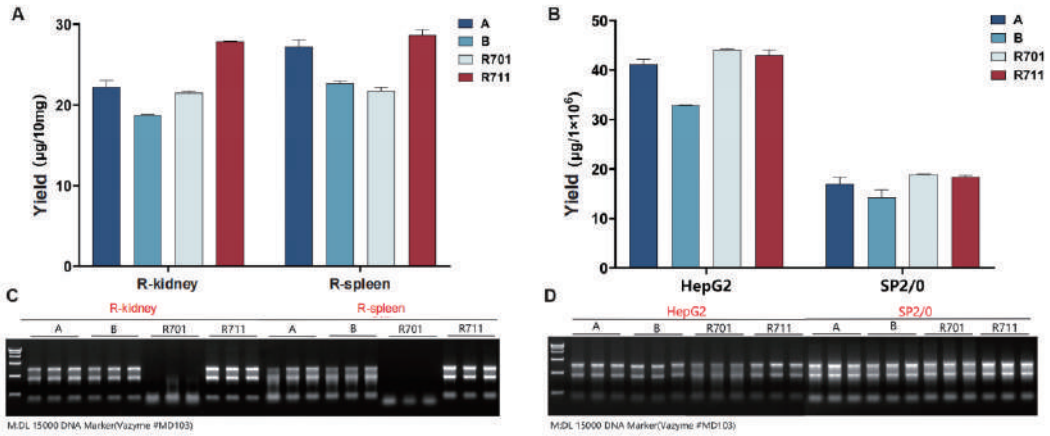
- Animal/plant tissues (20 - 50 mg)
- Cells (1×10^6 - 1×10^7)

Workflow

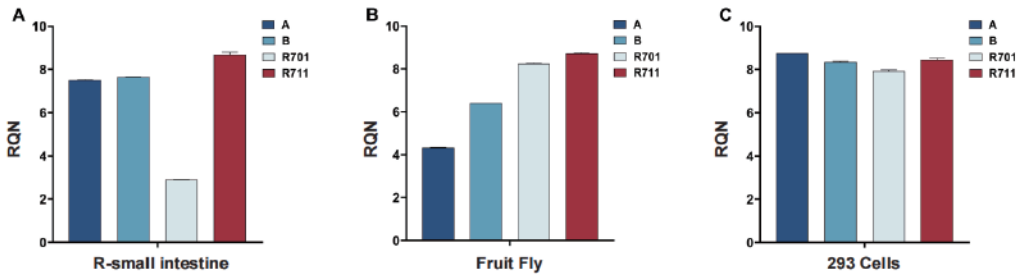


Superior Quality

The RNA of rat kidney, spleen, HepG2 and SP2/0 cells were extracted using Vazyme #R711 and other similar products (Supplier A, Supplier B, and Vazyme #R701), respectively. And the concentration and integrity of RNA products were analyzed by agarose gel electrophoresis. The results show that the yield and integrity of RNA extracted by Vazyme #R711 are excellent.

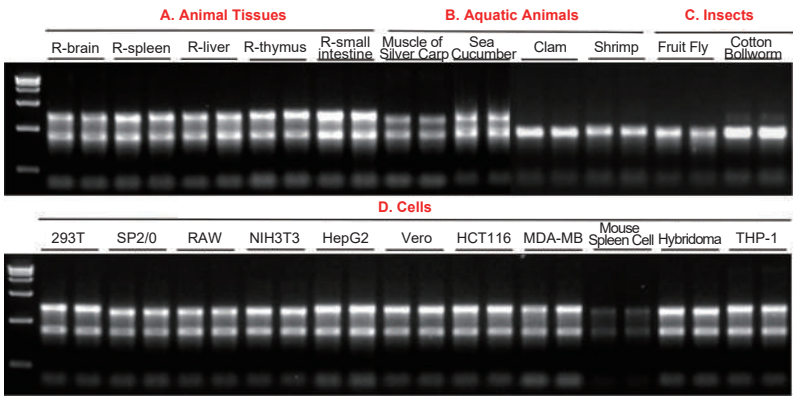


The integrity of RNA from rat small intestine, fruit fly and 293 cells was detected by Qseq. The results show that Vazyme #R711 has larger RQN, indicating that RNA prodcucts extracted by Vazyme #R711 have higher quality.



Wide Compatibility

The RNA from different animal tissuses (including insects and aquatic animals) and cultured cells was detected by Vazyme #R711. Then the RNA products were analyzed by gel electrophoresis. As shown in the gel image, Vazyme #R711 is compatible with a wide range of samples.



VeZol Reagent

Features

- Ultra classical organic extraction reagent
- Super lysis capability
- RNA extraction from a wide variety of samples are available

Product Description

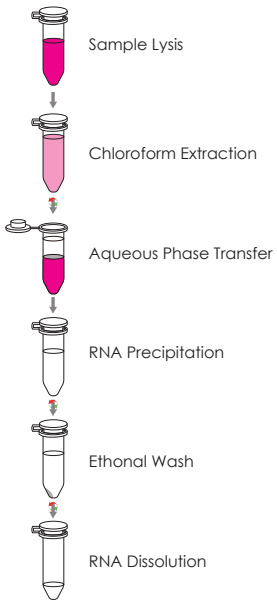
VeZol Reagent is intended for the isolation of high-quality total RNA from cultured cells, animal tissues, and plant tissues. VeZol Reagent is a monophasic solution of phenol and guanidine isothiocyanate supplemented with optimized proprietary components for more effective sample disruption and RNase inhibition. After rapid sample lysis with VeZol Reagent and chloroform extraction, the lysate separates into an upper aqueous phase (containing RNA), an interphase, and a lower red organic phase, and total RNA can be obtained in high yield and purity by isopropanol precipitation and ethanol wash. The resulting total RNA can be used directly for RT-PCR, RT-qPCR, Northern blot, Dot blot, *in vitro* translation, high-throughput sequencing, and other molecular biology experiments.

Product Name	Size	Cat.No.
VeZol Reagent	100 ml	R411-01
	200 ml	R411-02

Sample Type

- It is applicable for a variety of cultured cells, animal tissues, and plant tissues.

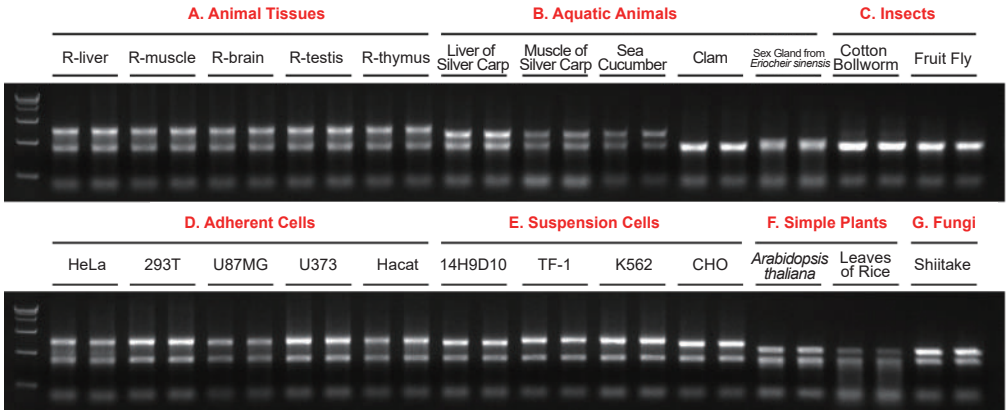
Workflow



Validated Sample	
Animal tissue (23 types)	Rat: heart, liver, spleen, lung, kidney, adipose, muscle, small intestine, brain, thymus, bone, testis
	Chicken: heart, liver, muscle
	Mouse: heart, liver, spleen, lung, kidney
	Zebrafish, fruit fly, corn earworm
Cell (22 types)	HEK 293, HEK 293T, SP2/0, RAW, Vero, A549, NIH 3T3, MCF-1, TF-1, HCT 116, Hep G2, MDA-MB-231, mouse primary splenocytes, hybridoma cell
Plant tissue (16 types)	Rice leaf, *Arabidopsis thaliana* leaf, wheat leaf, corn leaf, soybean leaf, tobacco leaf, cotton leaf, China rose, strawberry, tomato (green), tomato (red), rice seed, uncoated cottonseed, wet corn seed, whorled watermilfoil, grape
Bacteria and fungi	Yeast, *Escherichia coli, Staphylococcus aureus*

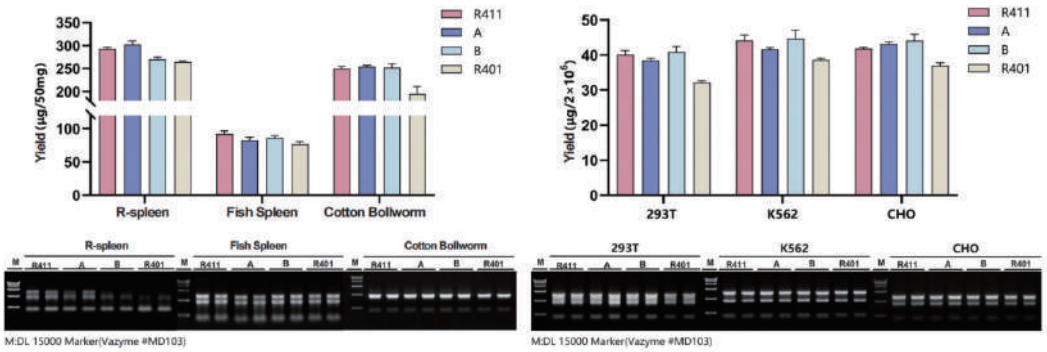
Wide Compatibility

Total RNA was extracted by Vazyme #R411 from different animal tissues(include aquatic animals and insects), cultured cells, simple plants and macro fungi. Then the RNA products were analyzed by gel electrophoresis.



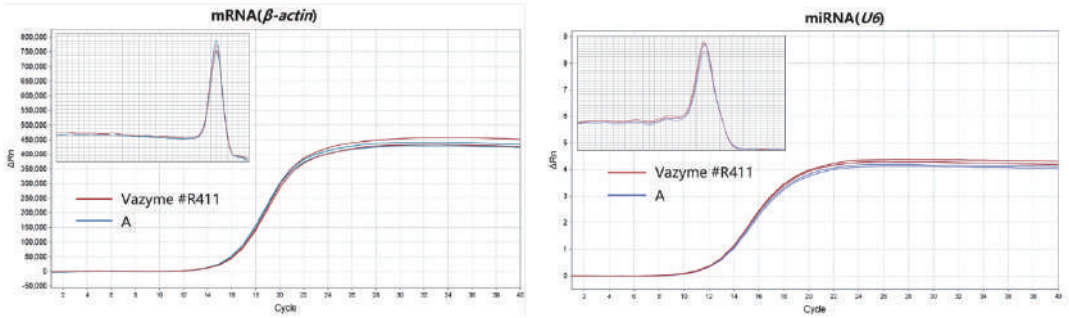
High Quality

Total RNA was extracted from different animal tissues and cultured cells using Vazyme #R411 with other similar products (Supplier A, Supplier B and Vazyme #R401), and the concentration was determined and detected by agarose gel electrophoresis. The results show that the extracted RNA by Vazyme #R411 has high yield and good integrity.



Wide Compatibility

RNA from 293 cells were extracted by Vazyme #R411 and supplier A. The expression level of mRNA (*β-actin*) and miRNA (*U6*) was deteced by qPCR assays. The data shows that Vazyme #R411 can be well applied to downstream experiments.



FastPure Cell/Tissue Total RNA Isolation Kit V2

Features

- Simple 6 min procedure
- Minimal gDNA residue
- Compatible with virtually all kinds of cell and tissue samples

Product Description

FastPure Cell/Tissue Total RNA Isolation Kit V2 is a kit that can quickly extract total RNA from animal tissues or cells. The kit is based on the silica gel column purification technology that eliminates the need to use toxic phenol/chloroform and β-mercaptoethanot to extract high-quality RNA during the extraction process, and maximizes the removal of DNA, miscellaneous proteins and other inhibitory impurities. The entire extraction process only requires 6 min. The product can be used for various downstream experiments, including RT-PCR, real-time PCR and microarray analysis.

Product Name	Size	Cat.No.
FastPure Cell/Tissue Total RNA Isolation Kit V2	50 rxns	RC112-01

Sample Type

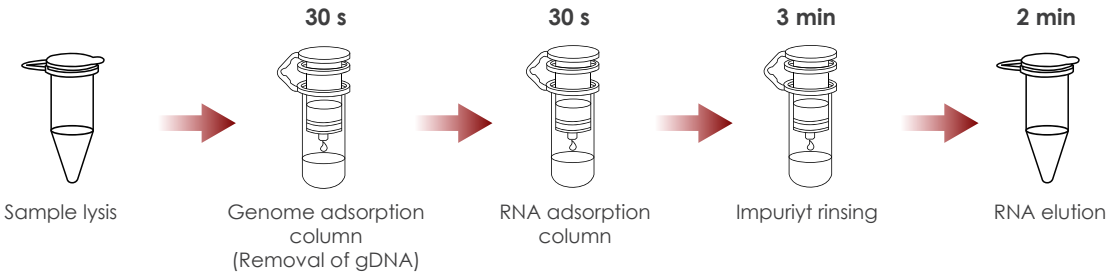
- Animal tissues (10 - 20 mg)
- Cultured cells (< 5×10^6)

Validated Samples

Source		Amount	DNA
Cell	HEK 293 Cells	5×10^5 - 1×10^7	20 - 30 μg
	CHO-K1	1×10^6	15 - 20 μg
	HeLa	1×10^6	10 μg
Leaf Pulp/Peel	Rat Liver	10 mg	35 - 45 μg
	Rat Brain		3 - 5 μg
	Rat Kidney		15 - 25 μg
	Rat Spleen		30 - 40 μg
	Rat Heart		5 μg
	Rat Lung		10 - 15 μg
	Mouse Adipose		2 - 4 μg
Bacteria	*Escherichia coli*	50	60 - 80 μg
	Staphylococcus aureus	50	15 - 25 μg
	Enterococcus	20	6 - 10 μg

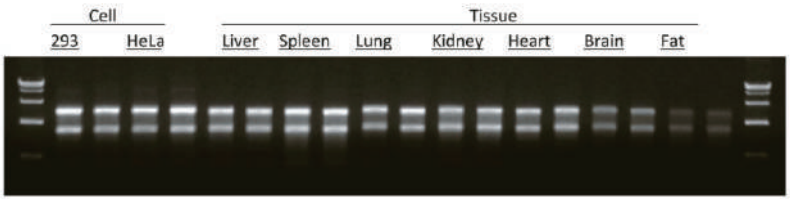
Super Fast

Process sample inputs from 10 to 20 mg of animal tissue or less than 5 x 10^6 cultured cells with one spin column in 6 min.



Wide Sample Applicability

Vazyme #RC112 was used for the RNA extraction and purification of different samples, and the final RNA product was detected by agarose gel electrophoresis. It shows that Vazyme #RC112 is well compatible in the extraction of RNA from different cell and animal tissue samples.

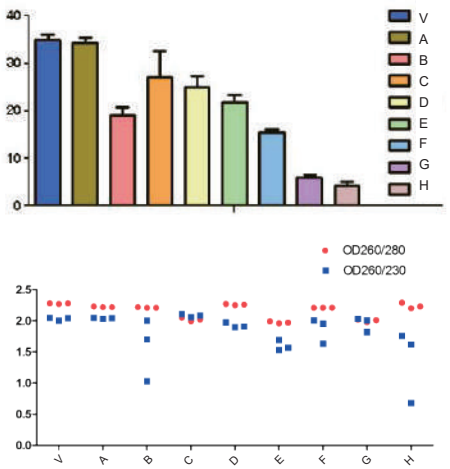


Note: The sample type involved in the figure includes HEK 293 cells, HeLa cells, rat (liver, spleen, lung, kidney, heart, brain tissue) and mouse (adipose tissue).

High Quality

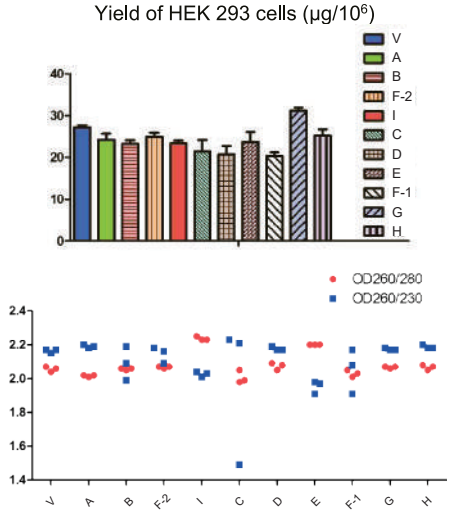
Vazyme #RC112 and commercially available similar products (from Suppliers A, B, C, D, E, F, G, H, and I) were used to extract total RNA from the rat liver tissue (10 mg) and HEK 293 cells as per their respective Instructions for Use. The extracted RNA was detected for concentration and purity. From the figure, it can be seen that Vazyme #RC112 has a higher yield than the other commercially available products for both sample types, and the $OD_{260/280}$ and $OD_{260/230}$ ratios are closer to the standard values, indicating better RNA purity.

Yield of rat liver (μg/10 mg)



Rat liver tissue-statistical chart of RNA purity results

Yield of HEK 293 cells (μg/10^6)



HEK 293 cells-statistical chart of RNA purity results

FastPure Universal Plant Total RNA Isolation Kit

Features

- Simple 11 min procedure
- No need for phenol or chloroform and β-mercaptoethanol
- Compatible with plants rich in polysaccharide and polyphenol

Product Description

FastPure Universal Plant Total RNA Isolation Kit can be used to quickly extract total RNA from plant tissues. The kit includes two solution systems designed for simple RNA extraction from a variety of plant tissues (wheat, rice, corn, *Arabidopsis thaliana*, tobacco, rape, etc.), polysaccharide and polyphenol rich plant tissues (cotton leaf, soybean leaf, pine needle, ginkgo leaf, fig leaf, gardenia leaf, wheat seed, corn seed, red bean seed, potato, sweet potato, soybean seed, sesame seed, peanut seeds, rapeseed, etc.), fruit pulp (watermelon, apple, peach, pear, banana, mango, etc.), and fungi (shiitake, button mushroom, oyster mushroom, *Neurospora crassa*, etc.). The kit is based on silica column purification technology and does not involve toxic reagents (e.g., phenol or chloroform and β-mercaptoethanol) or time-consuming alcohol precipitation. The whole extraction process takes only 11 min. FastPure gDNA-Filter Columns III in the kit effectively remove impurities and gDNA. FastPure RNA Columns V efficiently bind to RNA and, paired with optimized buffers, yield high-purity total RNA with minimal gDNA residue and no protein or other impurities that can be used for a range of downstream experiments, including RT-PCR, real-time PCR, RNA library preparation, microarray analysis, Northern blot, dot blot, and molecular cloning.

Product Name	Size	Cat.No.
FastPure Universal Plant Total RNA Isolation Kit	50 rxns	RC411-01

Sample Type

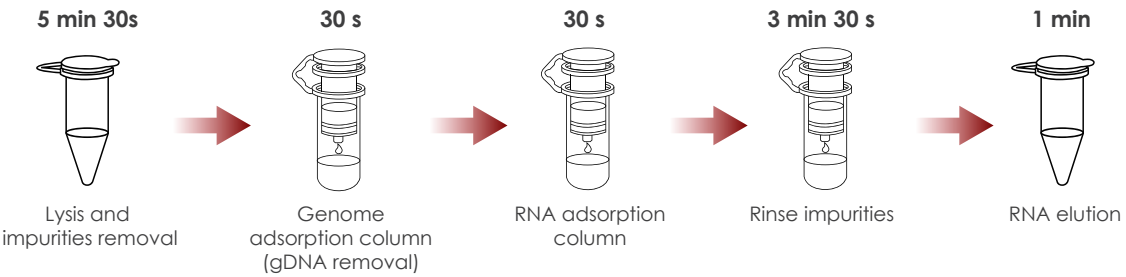
- Leaves: 50 - 100 mg
- Polysaccharide tubers, tuberous roots, seeds: 20 - 50 mg
- Fruit pulp: 100 - 200 mg
- Fungi: 20 - 100 mg

Validated Samples

Source		Amount (mg)	DNA (μg)
Root	*Solanum tuberosum* (potato)	100	15
	Ipomoea batatas (sweet potato)	100	11
	Nicotiana tabacum (tobacco)	100	26
Leaf	*Triticum aestivum* (wheat)	100	61
	Oryza sativa (rice)	100	42
	Zea mays (maize)	100	54
	Arabidopsis thaliana (thale cress)	100	30
	Nicotiana tabacum (tobacco)	100	20
	Fragaria ananassa (strawberry)	50	35
Pulp/Peel	*Fragaria ananassa* (strawberry)	100	9
	Amygdalus persica (peach)	100	7
	Citrullus lanatus (watermelon)	100	5.5
Seed	*Vigna angularis* (adzuki bean)	50	45
	Arachis hypogaea (peanut)	50	3.5
Fungi	*Flammulina filiformis* (enokitake)	100	85.2
	Lentinula edodes (shiitake)	100	85.2

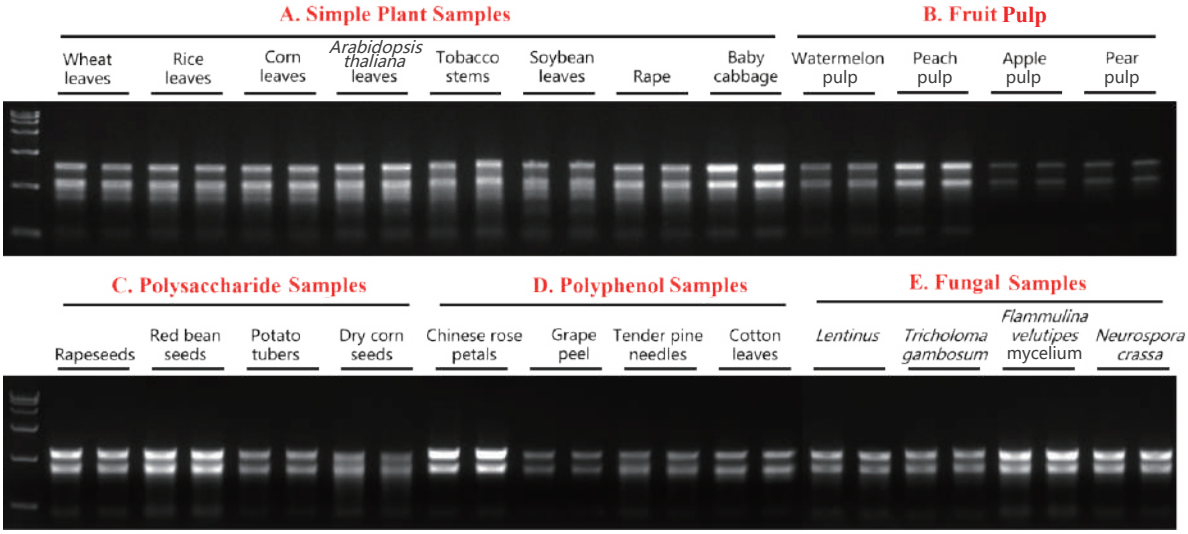
Simple and Fast

Vazyme #RC411 is easy to use. The operation can be completed at room temperature within 11 min.



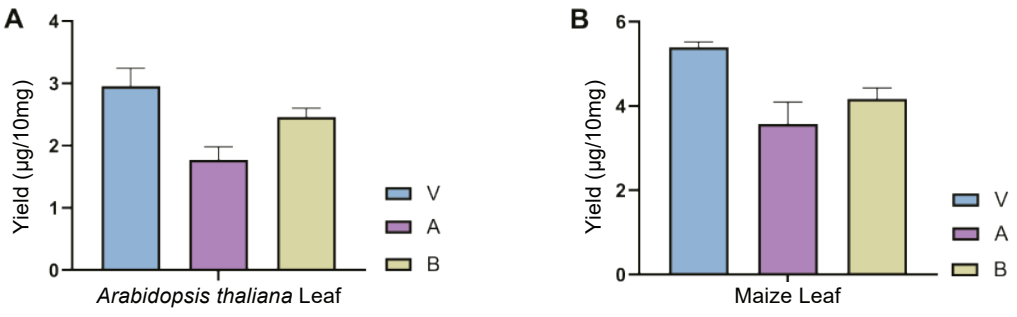
Wide Compatibility

RNA was extracted from different plants (common plants, fruit pulp, polysaccharide- and polyphenol-rich plants) and fungal samples with Vazyme #RC411, and analyzed by agarose gel electrophoresis. As can be seen from the figure, Vazyme #RC411 is compatible with many types of plant samples and some fungal samples.



High Yield

The total RNA from *Arabidopsis thaliana* leaves and maize leaves were extracted by Vazyme #RC411 and similar products (from supplier A and supplier B, respectively). The yield of RNA products was deteced. The data shows that the RNA extracted with Vazyme #RC411 has higher yield than supplier A and supplier B.



Microbial DNA&RNA Extraction

Introduction

Humans have co-evolved with the trillions of microbes that inhabit our bodies and that create complex, body–habitat-specific, adaptive ecosystems that are finely attuned to relentlessly changing host physiology. Dysbioses in the microbiome have been associated with numerous diseases, including inflammatory bowel disease, multiple sclerosis, diabetes (types 1 and 2), allergies, asthma, autism, and cancer[1]. Therefore, understanding the properties of the healthy microbiome, as well as the many different microbial ecologies encountered in the absence of overt disease, is a necessary first step in identifying and correcting microbial configurations associated with disease. The application of high-throughput nucleic acid and protein sequencing technologies is transforming our understanding of microbiomes and their interactions with their hosts in health and disease[2]. It is particularly crucial to obtain high quality microbial DNA and RNA products.

Selection Guide

Method	Sample Types	Time	Final Product	Product Name	Cat.No.#
Magnetic Beads	• Blood • Swabs • Tissue homogenate • Semen	≈ 19 min (automatic)	Viral DNA/RNA	VAMNE Virus DNA/RNA Extraction Kit 3.0 (32 Prepackaged)	RM501-01/02/03
				VAMNE Virus DNA/RNA Extraction Kit 3.0 (96 Prepackaged)	RM502-01
	• Blood • Biological fluid • Swabs	44 min	Viral, bacterial, fungal DNA/RNA	VAMNE Magnetic Pathogen DNA/RNA Kit	RM601-01
		33 - 38 min (automatic)		VAMNE Magnetic Pathogen DNA/RNA Kit (Prepackaged)	RM602-01
Spin Column	• Blood • Swabs • Tissue homogenate • Biological fluid	12 min	Viral DNA/RNA	FastPure Viral DNA/RNA Mini Kit Pro	RC323-01
	• Blood • Swabs • Bacteria • Biological fluid	• Host DNA removal - 43 min • Microbial DNA - 23 min	Microbial DNA	FastPure Host Removal and Microbiome DNA Isolation Kit	DC501-01
	• Blood • Swabs • Bacteria • Tissue • Biological fluid	23 min	Microbial DNA ang host DNA	FastPure Microbiome DNA Isolation Kit	DC502-01

Reference

1.Lloyd-Price, J., Abu-Ali, G. & Huttenhower, C. The healthy human microbiome. Genome *Med* 8, 51 (2016).

2.Broberg, M., & McDonald, J. E. (2019). Extraction of Microbial and Host DNA, RNA, and Proteins from Oak Bark Tissue. *Methods and protocols*, 2(1), 15.

VAMNE Virus DNA/RNA Extraction Kit 3.0

Features

- **High Sensitivity:** Efficiently detect low concentration samples and reduce the risk of missed detection
- **Easy to Operate:** Process up to 32/96 individual samples in 19 minutes
- **Flexible Throughput:** Choose 1 T, 8 T or 16 T so you can process a wide range of throughputs
- **Safe and Nontoxic:** No toxic reagents and pungent odor, ensuring the safety of operation

Product Description

VAMNE Virus DNA/RNA Extraction Kit 3.0 can be performed on automatic nucleic acids extraction instrument (Vazyme #VNP-32P). The kit uses unique embedded superparamagnetic silicon-based magnetic beads, which can quickly extract high-purity viral nucleic acids (DNA/RNA) from various liquid samples such as blood, serum, plasma, swab eluate and tissue homogenate, enabling high-throughput processing of parallel samples.

VAMNE Virus DNA/RNA Extraction Kit 3.0 (32 Prepackaged) (Vazyme #RM501) works with automatic nucleic acids extraction instrument (Vazyme #VNP-32P). It has all sizes (1 T/8 T /16 T), so you can process a wide range of throughputs within 19 min. VAMNE Virus DNA/RNA Extraction Kit 3.0 (96 Prepackaged) (Vazyme #RM502) works with full-automatic nucleic acids extraction instrument (Vazyme #VNP-96P). Process 96 samples at the same time to satisfy the high throughput demand.

	Product Name	Size	Cat.No.
	VAMNE Virus DNA/RNA Extraction Kit 3.0 (32 Prepackaged)	50 x 1 T / 6 x 8 T / 6 x 16 T	RM501-01/02/03
	VAMNE Virus DNA/RNA Extraction Kit 3.0 (96 Prepackaged)	96 T	RM502-01

Sample Type

Blood, serum, plasma, swab eluate, tissue homogenate and more.

Applicable Instruments

Vazyme #RM501 works with automatic nucleic acids extraction instrument (Vazyme #VNP-32P) and other similar instruments (heating slots position: 1, 6, 7 and 12).

Vazyme #RM502 works with full-automatic nucleic acids extraction instrument (Vazyme #VNP-96P) and other similar instruments (heating plates position: 1, 6).

Compatible with Complex Samples

The positive samples of African swine fever virus (ASFV) (Figure 1A), porcine epidemic diarrhea virus(PEDV) (Figure 1B), and porcine reproductive and respiratory syndrome virus (PRRSV) (Figure 1C) were extracted with Vazyme #RM501 and similar products (Supplier A, Supplier B-1, Supplier B-2). The extracted products were detected by qPCR assays. The results show that Vazyme #RM501 exhibits better sample compatibility for both DNA and RNA viruses.

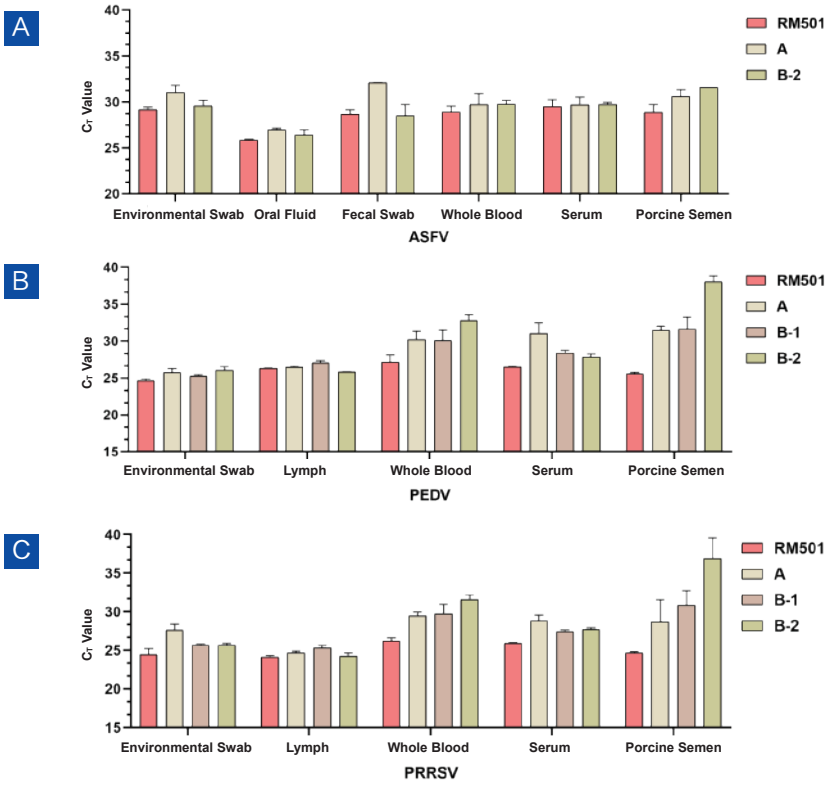


Figure 1. Comparison of compatibility between different samples

Efficient Extraction of Trace Nucleic Acids

12 positive samples of ASFV, PEDV, and PRRSV were taken respectively, and extracted with Vazyme #RM501, Vazyme #RM502 and similar products (Supplier A, Supplier B-2 and Supplier C). Then the detection rates were caculated after qPCR assays. The data indicates that Vazyme #RM501 and RM502 have a higher detection effect on low concentration samples, which can effectively reduce the risk of missed detection.

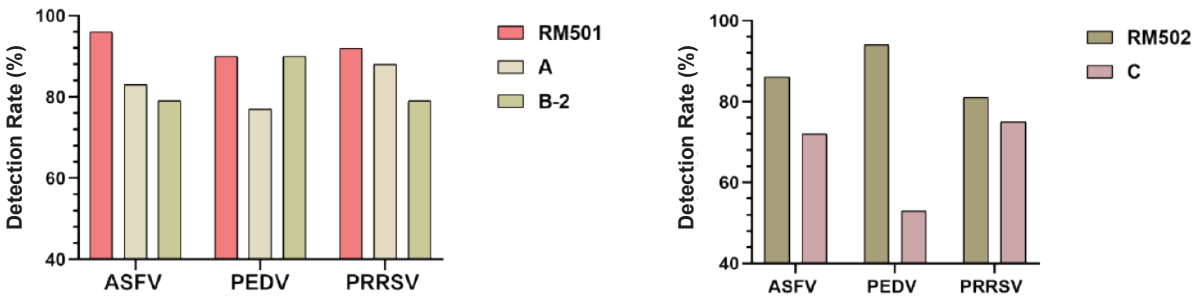


Figure 2. Detection rates of ASFV, PEDV and PRRSV samples with different extraction reagents

FastPure Viral DNA/RNA Mini Kit Pro

Features

- Easy capture of trace amounts of nucleic acids
- Operate at room temperature for 12 min
- Applicable to many types of samples such as whole blood, serum, plasma, swab, tissue, alveolar lavage fluid, and cell culture supernatant

Product Description

FastPure Viral DNA/RNA Mini Kit Pro is a extraction kit based on spin column, which can extract viral DNA/RNA from multiple types of samples. The kit uses a unique lysis system, without high temperature incubation, and can significantly improve the recovery rate of trace nucleic acid with carrier RNA. After specific adsorption on silica gel membrane, viral DNA/RNA can be quickly and efficiently purified. For a single sample, it only takes 12 minutes to finish extraction. And the products can be directly used for downstream related experiments such as reverse transcription, PCR, Real-Time PCR, NGS and Northern blot.

Product Name	Size	Cat.No.
FastPure Viral DNA/RNA Mini Kit Pro	50 rxns	RC323-01

Sample Type

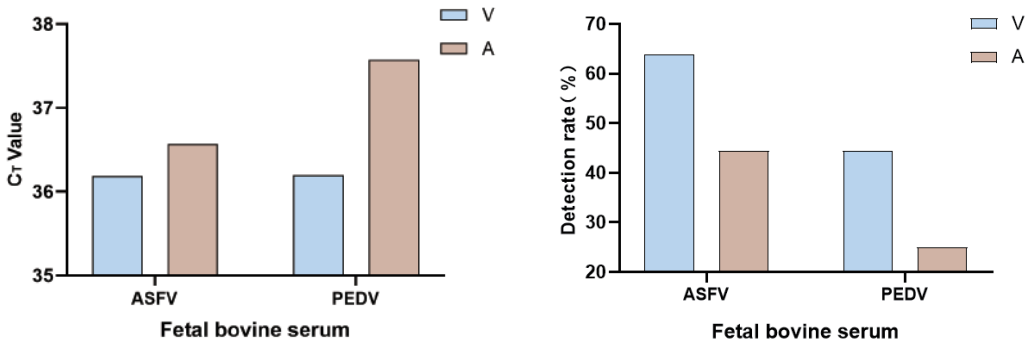
- Blood: whole blood, serum, plasma
- Tissue: liver, spleen, lung, kidney, lymph, node, small intestine, etc.
- Others: stool, buccal swab, bronchoalveolar lavage fluid, cell culture supernatant

Validated Samples

Virus	Type	Sample
ASFV (African swine fever virus)	DNA	• Nasopharyngeal,fecal and environmental swab • Tissue homogenate • Whole blood, serum, plasma
CSFV (Classical swine fever virus)	RNA	
PRRSV (Porcine reproductive and respiratory syndrome virus)	RNA	
PoRV (Porcine rubulavirus)	RNA	
PEDV (Porcine epidemic diarrhea virus)	RNA	
PCV (Porcine circovirus)	DNA	Cell culture supernatant
H1N1	RNA	Allantoic fluid of chicken embryo
AAV (Adeno associated virus)	DNA	Cell culture supernatant
HPV (Human papilloma virus)	DNA	Cervical exfoliated cells
HBV (Hepatitis B)	DNA	Serum

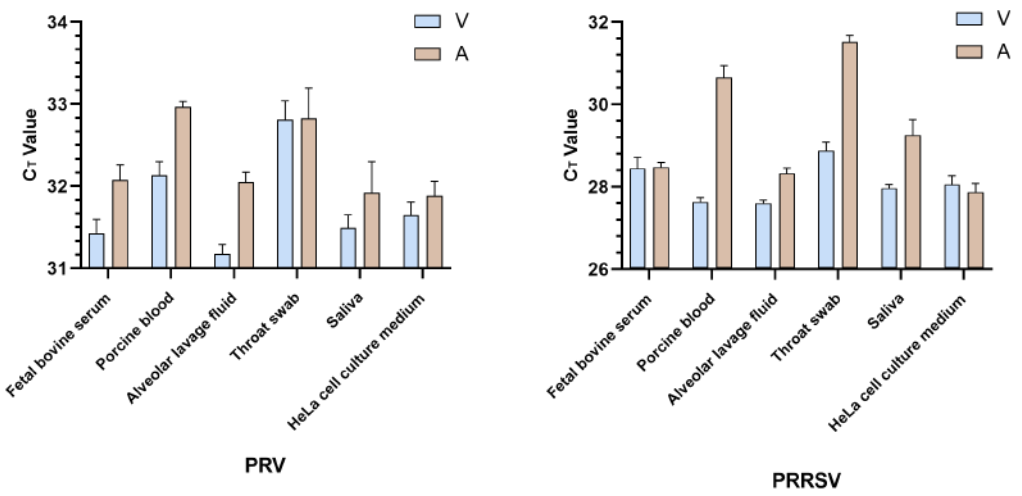
Efficient Extraction of Trace Nucleic Acids

Detection of low concentrations of African Swine Fever Virus (ASFV) and Porcine Epidemic Diarrhea Virus (PEDV) in fetal bovine serum samples with different dilution gradients. The extraction was carried out according to the extraction process of Vazyme #RC323 (V) and a similar product of supplier A. Then the extracted products were detected by qPCR. The lower the average C_T value, the higher the extraction efficiency. The higher the number of detections, the higher the detection rate. The results show that the extraction efficiency and detection rate of Vazyme #RC323 for low-concentration virus samples are better than those of similar products from supplier A.



Wide Sample Compatibility

Detection of Pseudorabies virus (PRV) and Porcine Reproductive and Respiratory disorder Syndrome Virus (PRRSV) in fetal bovine serum, porcine blood, alveolar lavage fluid, throat swab, saliva and HeLa cell culture medium. The above samples were extracted by Vazyme #RC323 (V) and a similar product of supplier A (A). Then the products were detected by qPCR assay. The lower the average C_T value, the higher the extraction efficiency. The results show that the extraction efficiency of Vazyme #RC323 for DNA and RNA viruses from different samples is basically better than that a similar product from supplier A.

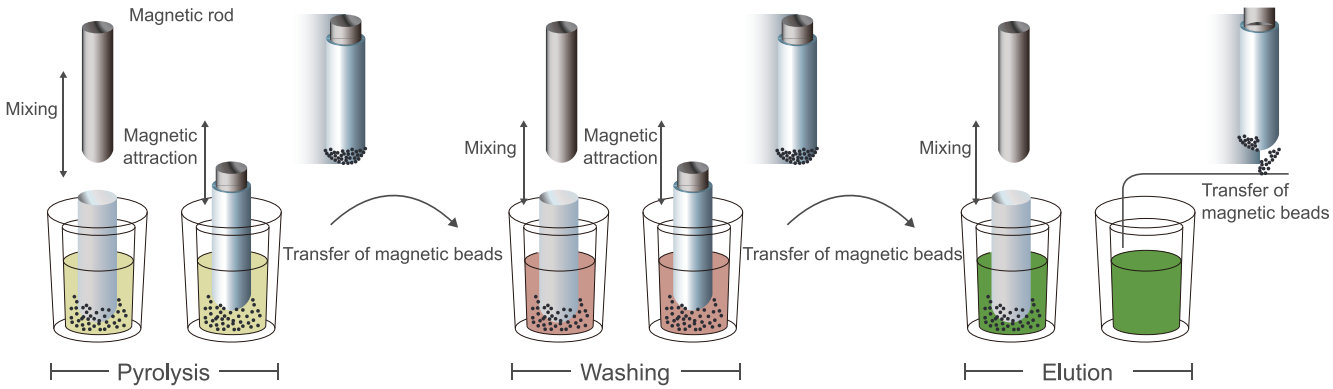


Instrument

Introduction

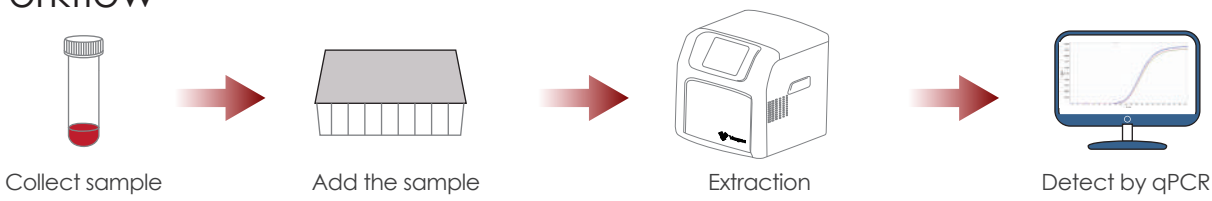
Magnetic beads technology is one of the emerging strategies for extracting RNA, genomic and microbial DNA. The technique involves the separation of nucleic acids from complex mixtures via complementary hybridization. In recent years, functionalized magnetic particle or beads have been coupled to suitable buffers systems for a rapid and efficient extraction procedure. The lack of centrifugation steps that can produce shear forces and cause breaking of nucleic acids is thought to better maintain intact longer fragments from genomic DNA. It is avoiding centrifugation steps as well as providing an alternative way for automation of extraction procedures from a large number of samples. In recent years, numbers of fully automated instruments have become commercially available. Vazyme provides automatic nucleic acid extraction solutions to help you get the desired targets while reducing processing time.

Operation Principles



Samples are added into lysis buffer, and the cells or pathogens are broken to release nulceic acid. Nulceic cid absorb to magnetic beads by hydrogen bonding or electrostatic interaction. → Magnetic rods transfer magnetic beads to wash buffer and remove protein and salt ions by repeated washing. → Magnetic rods transfer magnetic beads to eluent. The obtained high quality nucleic acid can be directly used for next experiment.

Workflow



Automatic Nucleic Acids Extraction Instrument

Features

- **Fast and efficient:** With prepackaged extraction reagents, 1 - 96 samples can be extracted in as little as 10 minutes
- **Easy to operate:** The operation interface is simple and easy to understand, preset extraction program, one-click start and run
- **Security and intelligence:** Equipped with door opening protection function to prevent contamination and safety problems caused by accidental door opening in experiments
- **Efficient anti-contamination:** Built-in UV disinfection function effectively reduces cross-contamination between samples

Product Description

Vazyme automatic nucleic acids extraction instrument is a high-throughput and high-precision nucleic acid extractor used in pair with prepackaged extraction reagents based on silica-coated superparamagnetic beads to extract and purify nucleic acids from the blood, tissue, cells, body fluids, bacteria, viruses, and many other biological samples. It purifies and enriches nucleic acids by utilizing magnetic rods to capture, transfer, and release magnetic beads. With highly automated, fast, and simple workflow, the product is ideal for a wide range of applications in molecular diagnosis and animal disease detection.

Product Name	Cat.No.	Samples per Run	Consumbles	Final Product
Automatic Nucleic Acids Extraction Instrument	VNP-32P	32	● 96 Deep Well Plate ● 24 Deep Well Plate	● Microbial DNA/RNA ● cfDNA ● gDNA ● Total RNA
Full-automatic Nucleic Acids Extraction Instrument	VNP-96P	96	● 96 Deep Well Plate	● Viral DNA/RNA

What can we offer ?

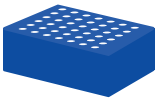
Instrument

Choose an appropriate instrument based on different throughput

Kit

Matching the reagent based on the sample type and target product

Customize



According to your needs, customized service can be offered

Specifications

Item	Parameter	
Product Name	Full-automatic Nucleic Acids Extraction Instrument	Automatic Nucleic Acids Extraction Instrument
Catalog Number	VNP-96P	VNP-32P
Test Principle	Magnetic Beads Method	
Throughput	96 - Well plate:1 - 96 24 - Well Plate:1 - 24	1 - 32
Volume	96 - Well plate:20 µl ~ 1000 µl 24 - Well Plate:200 µl ~ 5 ml	96 Deep Well Plate: 20 µl ~ 1000 µl
Heating Temperature	Room Temperature ~ 120°C	
Display	8-inch color touch screen, can be connected to external mouse	
Program Management	Add, Edit, Save as, Delete, Program Mode	
Network	Wi-Fi Function	
Disinfection	UV Disinfection	
Maximum Input Power	500 W	
Size	750 mm × 495 mm × 525 mm	412 mm × 410 mm × 430 mm
Weight(kg)	70 kg	30 kg

Recommended Kits

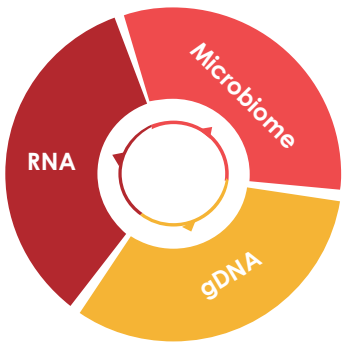
VAMNE Virus DNA/RNA Extraction Kit 3.0

Sample Type	Blood, serum, plasma,tissue homogenate, swab eluate	
Work with	VNP-32P	VNP-96P
Cat.No.	RM501-01/02/03	RM502-01
Size	50 x 1 T / 6 x 8 T / 6 x 16 T	1 x 96 T
Processing Time	19 min	
Input Volume	100 - 400 µl	
Elution Volume	70 µl	

VAMNE Magnetic Pathogen DNA/RNA Kit (Prepackaged)

Sample Type	Bronchoalveolar lavage fluid, sputum, cerebrospinal fluid, swab eluate, blood, serum, plasma	
Work with	VNP-32P	
Cat.No.	RM602-01	
Size	4 × 16 T	
Processing Time	Pathogen DNA/RNA: 38 min	cfDNA/cfRNA: 33 min
Input Volume	200 µl of biofluid or swab elute	400 µl of serum or plasma
Elution Volume	80 µl	

Application



The Centers for Disease Control | Animal Epidemic Disease | Scientific Research Institutions | Clinical Diagnosis | Food Inspection

Selected Product Citations

1.Zong, Q., Li, K., Qu, H., Hu, P., Xu, C., Wang, H., Wu, S., Wang, S., Liu, H. Y., Cai, D., & Bao, W. (2023). Sodium Butyrate Ameliorates Deoxynivalenol-Induced Oxidative Stress and Inflammation in the Porcine Liver via NR4A2-Mediated Histone Acetylation. *Journal of agricultural and food chemistry, 71*(27), 10427–10437. (#RC112)

2.Yang, J., Xu, J., Zhang, Y., Cui, J., Hu, H., Xue, J., & Zhu, L. (2023). Two R2R3-MYB transcription factors from Chinese cedar (Cryptomeria fortunei Hooibrenk) are involved in the regulation of secondary cell wall formation. *Plant physiology and biochemistry: PPB, 201*, 107879. (#RC112)

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6.Liu, M., Ma, W., Su, X., Zhang, X., Lu, Y., Zhang, S., Yan, J., Feng, D., Ma, L., Taylor, A., Ge, Y., Cheng, Q., Xu, K., Wang, Y., Li, N., Gu, A., Zhang, J., Luo, S., Xuan, S., Chen, X., … Shen, S. (2022). Mutation in a chlorophyll-binding motif of Brassica ferrochelatase enhances both heme and chlorophyll biosynthesis. *Cell reports, 41*(10), 111758. (#DC201, #DC301)

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8.Chen, X., Zhang, Z., Sun, N., Li, J., Ma, Z., Rao, Z., Sun, X., Zeng, Q., Wu, Y., Li, J., Zhang, J., & Chen, Y. (2022). Vitamin D receptor enhances NLRC4 inflammasome activation by promoting NAIPs-NLRC4 association. *EMBO reports, 23*(9), e54611. (#DC201)

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Ordering Information

■ Products for RNA Extraction

Product Name	Size	Cat. No.
FreeZol Reagent	200/400 rxns	R711-01/02
VeZol Reagent	100/200 mL	R411-01/02
FastPure Cell / Tissue Total RNA Isolation Kit V2	50 rxns	RC112-01
MiPure Cell/Tissue miRNA Kit (Spin Column)	50 rxns	RC201-EN
FastPure Plant Total RNA Isolation Kit (Polysaccharides&Polyphenolics-rich)	50 rxns	RC401-01
FastPure Universal Plant Total RNA Isolation Kit	50 rxns	RC411-01

■ Products for DNA Extraction and Purification

Product Name	Size	Cat. No.
FastPure Cell/Tissue DNA Isolation Mini Kit	100 rxns	DC102-01
FastPure Bacteria DNA Isolation Mini Kit	100 rxns	DC103-01
FastPure Plant DNA Isolation Mini Kit	50 rxns	DC104-01
FastPure FFPE DNA Isolation Kit	50 rxns	DC105-01
FastPure Blood / Cell / Tissue / Bacteria DNA Isolation Mini Kit	50/200 rxns	DC112-01/02
FastPure Gel DNA Extraction Mini Kit	100 rxns	DC301-01
FastPure Plasmid Mini Kit	100 rxns	DC201-01
FastPure EndoFree Plasmid Mini Kit	50 rxns	DC203-01
FastPure EndoFree Plasmid Midi Kit	10 rxns	DC205-01
FastPure EndoFree Plasmid Maxi Kit	10 rxns	DC202-01
VAMNE MagUltra Blood Genomic DNA Extraction Kit	50/200 rxns	DM101-01/02
VAHTS Serum/Plasma Circulating DNA Kit	200 rxns	N902-02
VAMNE MagUltra Circulating Cell-free DNA Isolation Kit	50/100 rxns	N913-01/02
ResiDNA Hunter Residual DNA Sample Preparation Kit	100 rxns	RD101-01
Room Temp Sample Lysis Kit	250/1,000/5,000 rxns	P073-01/02/03

■ Products for Microbial DNA and RNA Extraction

Product Name	Size	Cat. No.
FastPure Viral DNA/RNA Mini Kit	100 rxns	RC311-01
FastPure Viral DNA/RNA Mini Kit Pro	50 rxns	RC323-01
FastPure Host Removal and Microbiome DNA Isolation Kit	50 rxns	DC501-01
FastPure Microbiome DNA Isolation Kit	50 rxns	DC502-01
VAMNE Magnetic Pathogen DNA/RNA Kit	50 rxns	RM601-01

■ Products for Automatic Nucleic Acid Extraction

Product Name	Size	Cat. No.
Virus DNA/RNA Extraction Kit 2.0 (Prepackaged)	50/48/96 T	RM401-01/02/04
VAMNE Virus DNA/RNA Extraction Kit 3.0 (32 Prepackaged)	50/48/96 T	RM501-01/02/03
VAMNE Virus DNA/RNA Extraction Kit 3.0 (96 Prepackaged)	96 T	RM502-01
VAMNE Magnetic Pathogen DNA/RNA Kit (Prepackaged)	64 T	RM602-01
VAMNE Magnetic Pathogen DNA Kit (Prepackaged)	64 T	DM202-01
Magnetic Blood DNA Extraction Kit (Prepackaged)	32/96 T	DM102-01/02
VAMNE Magnetic Cell/Tissue Total RNA Kit (Prepackaged)	96 T	RMA101-01

■ Instruments for Automatic Nucleic Acid Extraction

Product Name	Size	Cat. No.
Automatic Nucleic Acid Extraction Instrument	1	VNP-32P
Full-automatic Nucleic Acid Extraction Instrument	1	VNP-96P

■ Related Products for Nucleic Acid Extraction

Product Name	Size	Cat. No.
RNA Keeper Tissue Stabilizer	100 ml	R501-01
RNase, RNA and DNA Remover	250 ml	R504
Proteinase K (20 mg/ml)	1 ml	DE102-01
RNase A (100 mg/ml)	500 µl	DE111-01
Lysozyme	200 mg	DE103-01
DNase I, RNase-free	1,000/10,000 U (1 U/µl)	EN401-01/02
	1,000/10,000 U (50 U/µl)	EN402-01/02

Memo

Published by Vazyme (688105.SH)

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