



Nucleic Acid Isolation & Automatic Solution

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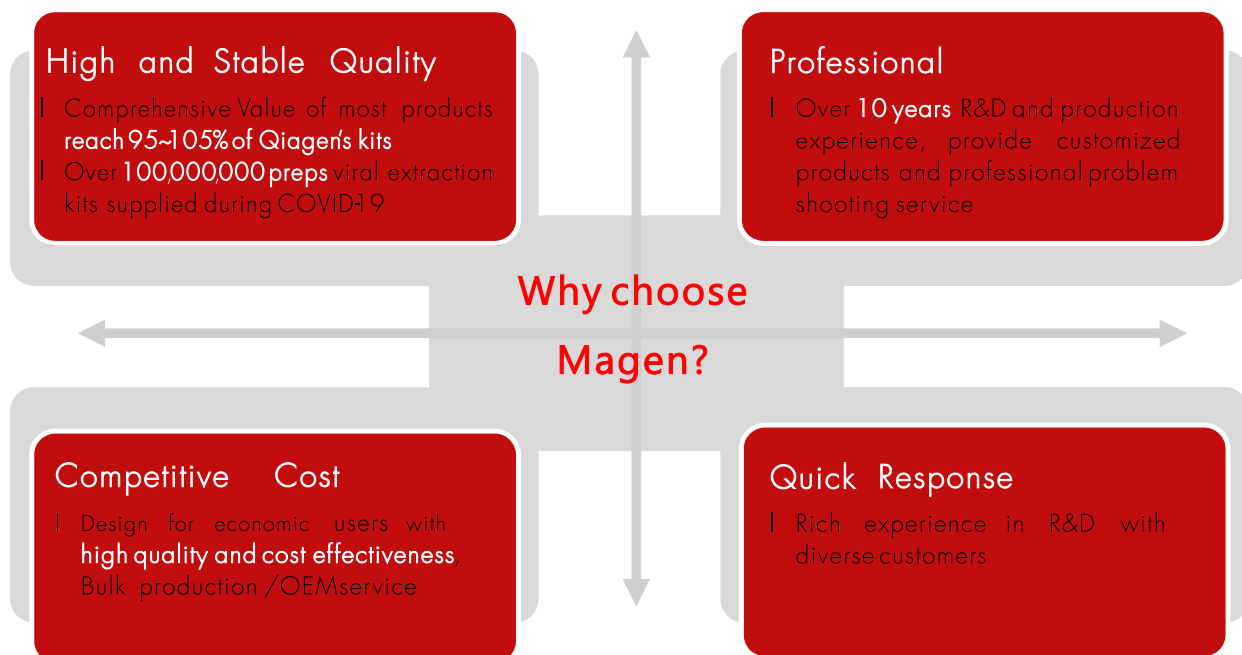


Magen is a biology company focused on biological samples preparation for **ten years**, including sample collection and preservation, nucleic acid purification, and automation with **over 500 different products**. We are aiming to supply high quality products and solutions to clinical users, scientific researchers, biology companies, agricultural applications and related government departments. Magen nucleic acid purification products offer for all biological samples, and have unique advantages in high throughput sample processing.

Magen nucleic acid purification products can be simply divided into 4 series. Silic membrane column purification (HiPure), magnetic particles purification (MagPure), salting out purification (SolPure) and DNA/RNA/ protein co-isolation (AllPure). We also provide Automatic Nucleic Acid Purification Machines. **About 80% products have been compared with Qiagen, MN, Life, ect corresponding products**. And all got excellent performance overall. In 2015, the company got in vitro diagnostic reagents production qualification, now we have dozens of nucleic acid purification products in clinical applications.

MagPure Circulating DNA Kits are mainstream products of noninvasive prenatal testing (NIPT) in Chinese market, which get about 70% market share in this field. HiPure Circulating DNA Kits (column method) possess excellent performance and cost effectiveness, not only hot sale in domestic market, are also popular in international markets. MagPure virus nucleic acid purification kits have high sensitivity detecting ability and stable quality, already used in various Provincial disease control centers, Entry and exit quarantine centers, Animal disease detection institutes and Hospitals. They are widely used in HBV, HCV, HIV, HINI and SARS quantitative detection. **During the covid-19 period, Magen has supplied over 100,000,000 preps of viral kits all over the world.**

For more products information, pls visit our website: www.magen-tec.com

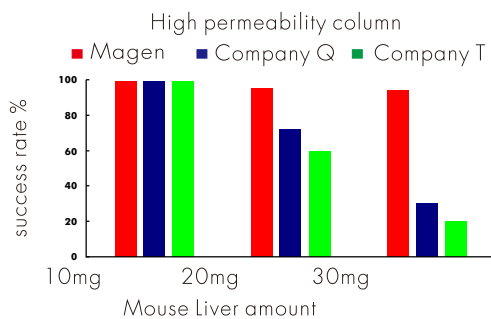


Magen Technology Overview

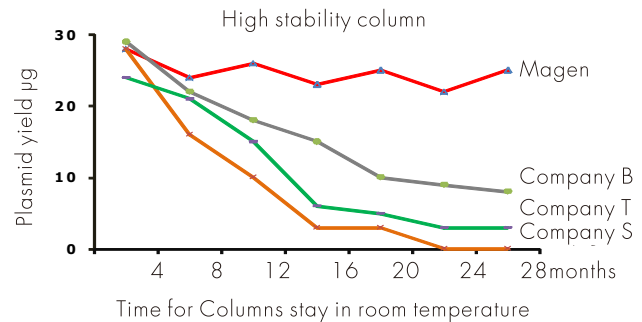
Magen Biotech developed series of sample preservation, transportation and nucleic acid purification technology. It can provide best solutions for various kinds of biological sample's nucleic acid purification. No matter what request you need, you can always find the right products in Magen's product line. Magen kits purification technology includes: HiPure (silica column purification technology), MaxPure (improved silica column purification technology), MagPure (magnetic beads purification technology), AllPure (DNA/RNA/Protein co-isolation technology), RaPure (rapid extraction technology), SolPure (solution purification technology), SafPure (sample transportation and purification), AmPure (Direct PCR technology). This catalogue only introduce some of our HiPure, MagPure, AllPure and SolPure purification products. For products not shown on this catalogue, please contact with our team (info@magen-tec.com).

HiPure - Column Purification Technology

HiPure purification technology uses silica membrane as matrix to change the nucleic acid isolation process from complicated centrifuge operation to simple filtration operation. In condition of high salt concentration, DNA/RNA are adsorbed on the silica membrane, but protein and other impurities are not adsorbed and flow through. Then protein and salt adsorbed on the silica membrane are removed by washing buffer. DNA/RNA washed out by low salt buffer and get purity DNA/RNA at last. HiPure technology greatly save time for nucleic acid isolation, most samples can get high quality DNA/RNA in only 10~20 minutes. In addition, the simplified filtration process greatly improves the stability of experiments in different times.



Comparing Magen, Company Q and T's RNA columns by extracting RNA from 10mg, 20mg and 30mg mouse liver samples. Repeat every testing 10 times and get success rates. Failure test results are caused by blocking of the columns. Results show that Magen RNA column has best permeability and can successfully deal with 30mg samples.

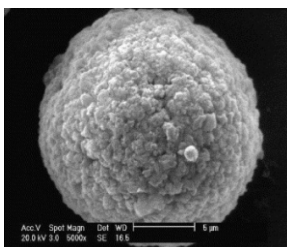


Comparing Magen and other 3 companies DNA columns by storing at room temperature for 4-28 months. Testing DNA yield by extracting plasmid DNA with HiPure Plasmid Micro Kit. Results show that Magen DNA column got stable binding ability from 4 to 28 months. And other 3 companies DNA columns binding ability decrease significantly for long time storage.

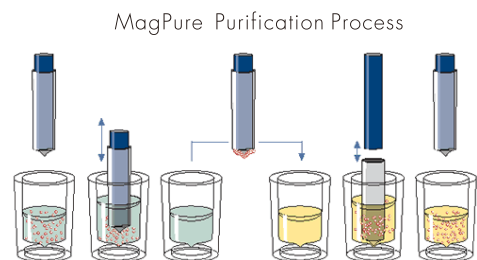
MagPure - Magnetic Particles Purification Technology

MagPure purification technology is specially designed for automatic nucleic acid extraction. It uses superparamagnetic particles (Magnetic Beads) as matrix, isolating DNA/RNA from different samples. DNA/RNA specially adsorbed with silanol or carboxyl groups on the magnetic beads. MagPure kits can be applied on pipetting workstation and automatic nucleic acid extraction machines, it changes DNA/RNA isolation from manual operation to machine automation. This technology greatly improves the accuracy and efficiency of the experiment, and gets more stable results. Magen's MagPure kits advantages:

1. Provide different size and functional groups particles for different samples to achieve optimal purification results.
2. Develop the best reagents systems and extraction process to minimize manual processing.
3. Design the best process and solutions according to the automated extraction platform.



A highly homogeneous carboxyl magnetic bead used for sequencing product recovery



MagPur kits work on KingFisher Machine

Researchers found cell free fetal DNA in plasma and serum of pregnant women's peripheral blood. This makes it possible to detect fetal chromosomal diseases by collecting maternal peripheral blood. Non-Invasive Prenatal DNA Testing (NIPT) is a safe/accurate/fast technology for fetal diseases detection including Down Syndrome, Edwards Syndrome, and Patau Syndrome. Magen R&D department developed different kinds of circulating nucleic acid purification kits for NIPT. We have column method purification kits for different sample size, and magnetic beads method purification kits for manual, pipetting workstation and different kinds of automatic nucleic acid extraction machines.



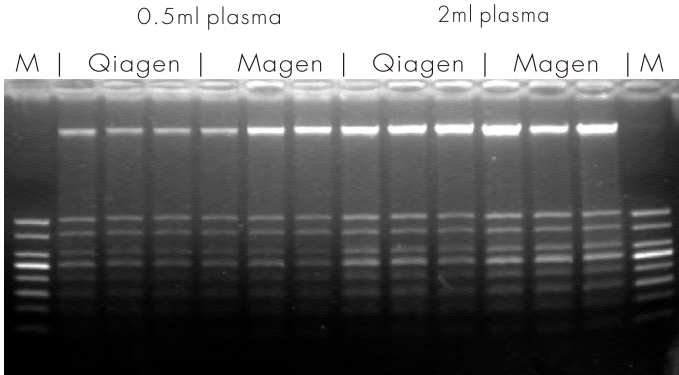
Product Guide

	Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Columns	HiPure Circulating Nucleic Acid Micro Kit	D318002	50		● Circulating DNA from 0.6ml plasma/serum/body fluids	
		D318003	250			
	HiPure Circulating Nucleic Acid Mini Kit	D318102	50		● Circulating DNA from 1ml plasma/serum/body fluids	
		D318103	250			
	HiPure Circulating DNA Midi Kit C (1~5ml)	D318202C	10		● Circulating DNA from 1~5ml plasma/serum/body fluids by Vacuum	
		D318203C	50			
HiPure Circulating DNA Midi Kit D (1~5ml)	D318203D	50		● Circulating DNA from 1~5ml plasma/serum/body fluids by spin		
HiPure Circulating DNA Kit (1~5ml)	IVD3182	50		● Circulating DNA from 1~5ml plasma/serum/body fluids by Vacuum	Qiagen 55114	
HiPure Circulating DNA&RNA Kit	R431602	50		● Circulating DNA/RNA all extracted from 1~5ml serum/plasma	Qiagen 55184	
	R431603	250				
Magnetic Beads	MagPure Circulating DNA Mini Kit	IVD5432	200		● Circulating DNA from 0.2~1.2ml plasma/body fluids by Magnetic beds	
	MagPure Circulating DNA Maxi Kit	IVD5435	50		● Circulating DNA from 1~6ml plasma/serum/body fluids by Magnetic beads	Life A29319
	MagPure Circulating DNA Rich Mini Kit	1291750	50		● Remove DNA fragments >500bp, rich small fragment cfDNA from 0.2~0.6ml plasma/serum	
		12917200	200			
	MagPure Circulating DNA Rich Maxi Kit	1292750	50		● Remove DNA fragments >500bp, rich small fragment cfDNA from 5ml plasma/serum	
12927200		200				

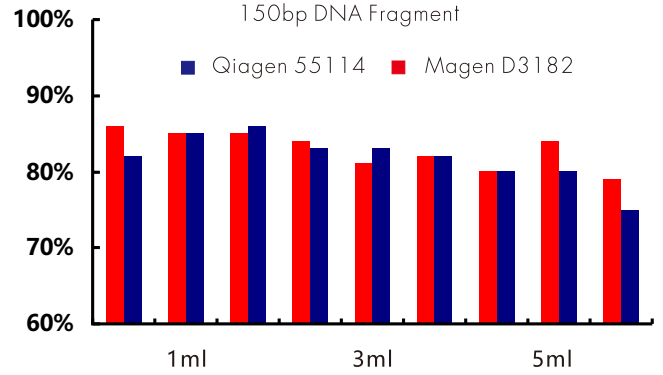
1. HiPure Circulating DNA Midi Kit (D3182)

HiPure Circulating DNA Kits Vs Qiaamp Circulating DNA Kit (55114)

DNA fragment recovery comparison

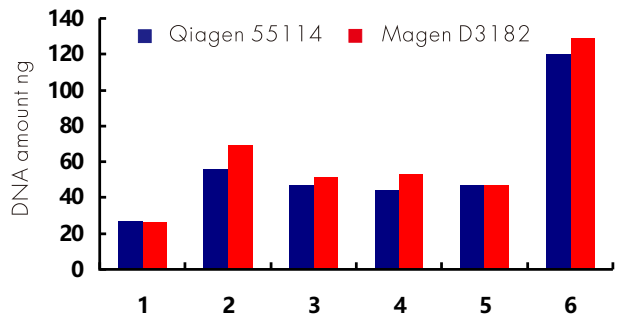
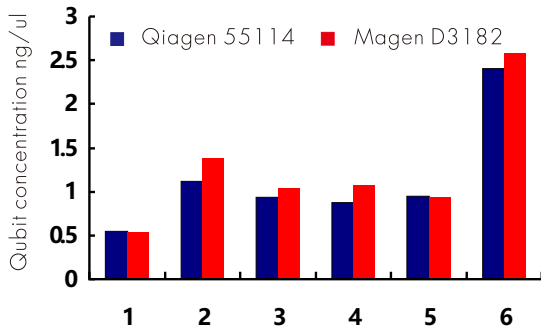


Add 100bp DNA Marker into 0.5ml and 2ml pig plasma, extract DNA by HiPure Circulating DNA Midi Kit C (D3182C) and QIAamp Circulating Nucleic Acid Kit (55114), then run DNA on Agarose gel. Results show that two kits get similar DNA yield.



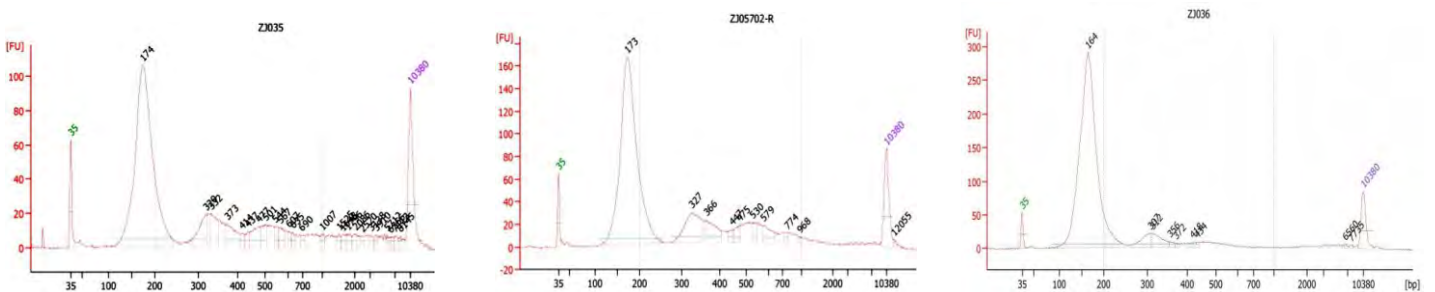
Add 400ng 150bp DNA fragment into 1ml, 3ml and 5ml plasma, extract DNA by Qiagen #55114 and Magen #D3182C, then quantitate DNA by Aligent 2100 and calculate DNA fragment recovery rate. Results show that two kits get similar DNA yield, both are >80%.

Human plasma DNA extraction comparison



Use Qiagen #55114 and Magen #D3182-03C extracting cfDNA from 6 human plasma samples (4ml). Elute purified DNA by 50ul Buffer TE. Testing DNA concentration and amount by Qubit. Results show that Magen #D3182 gets higher DNA yield than Qiagen #55114.

Aligent 2100 analyze results for CFDNA extracted from 2ml plasma



Use Magen HiPure Circulating DNA Kit C (D3182-03C) extracting cfDNA from 3 human plasma samples (2ml) with vacuum operation. Elute purified cfDNA by 50ul Buffer TE and then analyze DNA by Aligent 2100.

1. HiPure Circulating DNA Midi Kit (D3182)

DNA extraction results of 52 clinical plasma samples (2~6ml)

No.	Plasma ml	Conc. ng/μl	Elute ul	DNA ng	No.	Plasma ml	Conc. ng/μl	Elute ul	DNA ng	No.	Plasma ml	Conc. ng/μl	Elute ul	DNA ng	No.	Plasma ml	Conc. ng/μl	Elute ul	DNA ng
1	2	0.54	45	24.2	14	3	29.50	25	737.5	27	4	3.44	12	41.3	40	5	9.87	25	246.8
2	2	0.92	45	41.3	15	3	1.29	25	32.3	28	4.5	27.70	25	692.5	41	5	1.32	25	33.0
3	2	2.32	45	104.4	16	3	2.13	25	53.3	29	4.5	1.63	25	40.8	42	5	1.19	25	29.8
4	2	1.09	45	49.1	17	3	1.21	25	30.3	30	4.5	7.40	25	185.0	43	5	0.98	25	24.5
5	2	1.09	45	49.1	18	3	1.88	25	47.0	31	4.5	5.68	25	142.0	44	5	3.29	25	82.3
6	2	0.37	45	16.5	19	3	1.31	25	32.8	32	4.5	1.74	25	43.5	45	5	3.78	25	94.5
7	2	1.43	45	64.4	20	3.5	1.61	25	40.3	33	4.5	2.66	25	66.5	46	5	2.15	25	53.8
8	2	1.15	45	51.8	21	3.5	0.88	25	22.1	34	5	4.31	25	107.8	47	5	2.34	25	58.5
9	2	0.621	45	27.9	22	3.5	1.18	25	29.5	35	5	16.30	25	407.5	48	5.5	2.85	25	71.3
10	2	1.07	45	48.2	23	4	1.29	25	32.3	36	5	1.63	25	40.8	49	5.5	1.14	25	28.5
11	2	0.60	45	27.1	24	4	2.13	25	53.3	37	5	2.03	25	50.8	50	5.5	1.46	25	36.5
12	2	1.69	45	76.05	25	4	1.24	25	31.0	38	5	2.10	25	52.5	51	5.5	2.15	25	53.8
13	2	0.72	45	32.5	26	4	0.55	25	13.7	39	5	0.95	25	23.8	52	6.5	5.06	25	126.5

52 cases using Magen #D3182C extracting circulating DNA from plasma samples (2~6ml), and then quantitate DNA by Qubit. Datas provided by our customers. Magen has dealt with above 100,000 cases on 2ml plasma sample for methylation analysis.

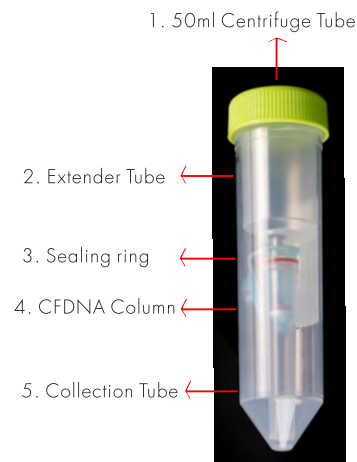
Selection guide for two operations

Centrifuge Operation (D3182D)

1. Place Extender Tube (2)/Sealing ring (3)/cfDNA Mini Column (4)/Collection Tube (5) together and put in 50ml Centrifuge Tube (1).
2. Lyse plasma by Buffer ACL and Proteinase K, then mix with Buffer ACB
3. Add 10~15ml mixture to Extender Tube and centrifuge for 3~5 mins, discard flow-through.
4. Remove mini column and elute with mini centrifuge.

Feature:

This process only need large centrifuge for 50ml tube, do not need vacuum pumping machine.

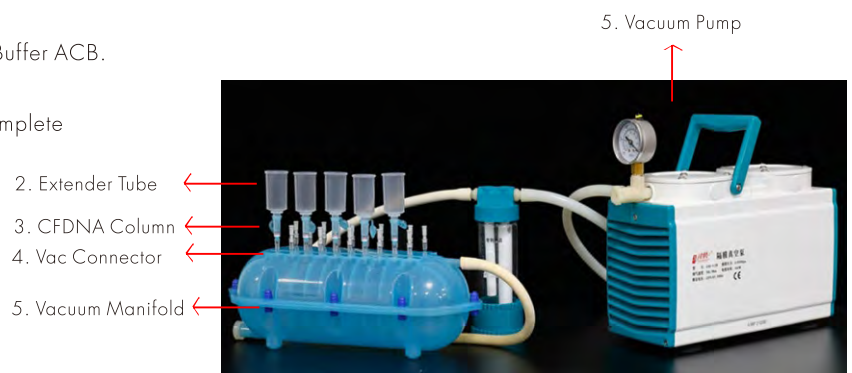


Vacuum Operation (D3182C/IVD3182)

1. Place Extender Tube (2)/ CFDNA Column (3)/Vac Connector (4) / Vacuum Manifold (5) together.
2. Lyse plasma by Buffer ACL/ Proteinase K and mix with Buffer ACB.
3. Add 20ml mixture to Extender Tube.
4. Open Vacuum pump (1) for filtration until all mixture complete (5~15min)

Feature:

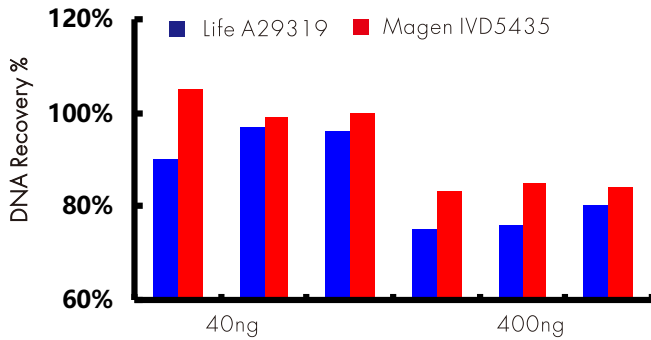
This process used vacuum manifold and vacuum pump. Magen vacuum Kits could be used with Magen MagVac 20 Vacuum Manifold System and also Qiagen QIAvac 24 plus vacuum manifold system.



MagVac 20 Vacuum Manifold System

2. MagPure Circulating DNA Maxi Kit--- 1~8ml Plasma Sample

DNA Fragment recovery comparison



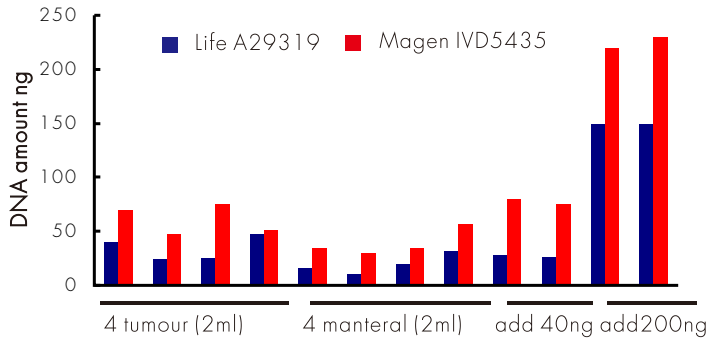
Add 40ng/400ng 200bp DNA fragment into 2ml manteral plasma, extract DNA by Life #A29319 and Magen IVD5435, then analyze DNA yield by Aligent 2100. Results show that Magen kit gets higher recovery (higher fluorescence on 200bp point). Magen kit gets 80% recovery on 400ng DNA fragment and reaches 90~100% on 40ng DNA fragment.

High DNA yield (same copies as circulating DNA)

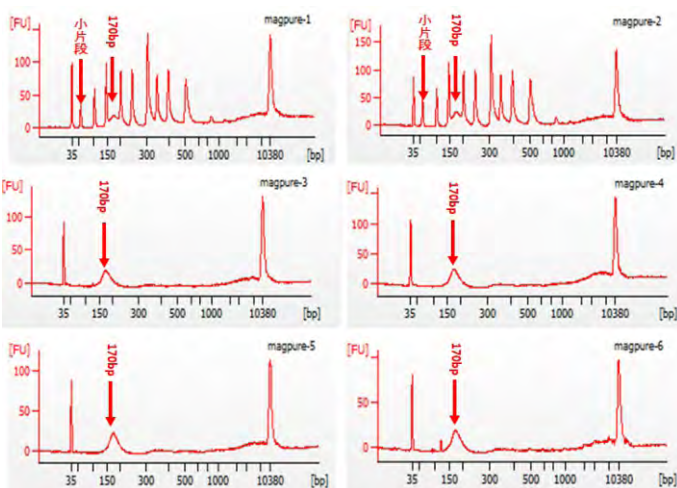
Sample Volume	HBV copies Added	CT value QPCR
200µl	1×10 ³	28.7
200µl	1×10 ³	28.5
400µl	1×10 ³	28.4
400µl	1×10 ³	28.3
2ml	1×10 ³	28.3
2ml	1×10 ³	28.0
4ml	1×10 ³	28.7
4ml	1×10 ³	28.8

Add 1×10³ HBV (about 1pg DNA, same copies as circulating DNA) into 200µl, 400µl, 2ml and 4ml manteral plasma sample. Extract DNA by Magen IVD5435, and then run real time PCR by HBV real time PCR Kit (Daan Gene). Results show that Magen #12917PC gets high recovery for different volume of samples. Even for trace amount HBV DNA.

2ml manteral/tumour plasma DNA extraction comperasion



Take 4 tumour/manteral plasma (2ml) samples, and add 40ng/200ng DNA Marker into 2 manteral plasma (2ml) samples. Extract DNA by Life #A29319 and Magen IVD5435, and analyze DNA by Qubit.



Aligent 2100 analysis data for manteral plasma, and manteral plasma with DNA Marker.

2ml tumour/healthy plasma DNA extraction Result

Sample Type	No.	Plasma (ml)	Elute (µl)	Qubit Conc. ng/µl	DNA ng
Tumour	P-1	2	60	0.795	39.8
Tumour	P-2	2	60	0.469	23.4
Tumour	P-3	2	60	0.340	17.0
Tumour	P-4	2	60	0.191	9.6
Tumour	P-5	2	60	0.271	13.5
Tumour	P-6	2	60	0.947	47.4
Tumour	P-7	2	60	0.330	16.5
Tumour	P-8	2	60	2.508	125.4
Tumour	P-9	2	60	0.488	24.4
Tumour	P-10	2	60	0.657	32.8
Healthy	N-1	2	60	0.168	8.4
Healthy	N-2	2	60	0.974	48.7
Healthy	N-3	2	60	0.198	9.9
Healthy	N-4	2	60	0.310	15.5
Healthy	N-5	2	60	0.287	14.4
Healthy	N-6	2	60	0.343	17.2
Healthy	N-7	2	60	0.191	9.6
Healthy	N-8	2	60	0.185	9.2
Healthy	N-9	2	60	0.284	14.2
Healthy	N-10	2	60	0.168	8.4

Extract DNA from 10 tumour/healthy plasma (2ml) samples by Magen IVD5435. And analyze DNA by Qubit.

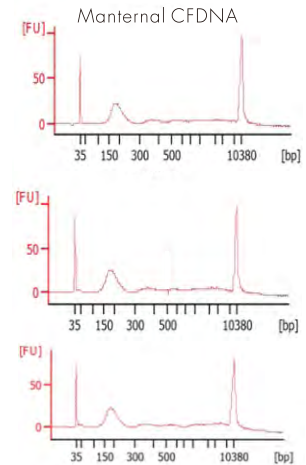
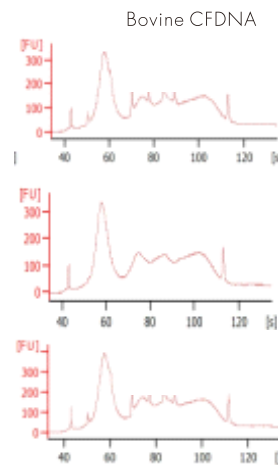
2~6ml plasma sample automatic purification--- KingFisher Flex Extraction Vs Column Extraction

Product	Plasma	Conc.	Elute	Vol.	DNA ng
Column	2ml	0.575	60µl	55µl	34.5
	4ml	0.875	60µl	55µl	52.5
	6ml	1.3	60µl	55µl	78
KingFisher Flex	2ml	0.532	60µl	56µl	31.9
	4ml	0.86	60µl	54µl	51.6
	6ml	1.22	60µl	53µl	73.2

Use MagPure Circulating DNA Maxi KF Kit (IVD5435) and HiPure Circulating DNA Midi Kit D (#D3182D) extracting CFDNA from 2ml/4ml /6ml plasma sample and analyze DNA by Qubit. Results show that using #IVD5435 on KingFisher Flex automatic machine gets almost same results with column method (#D3182D). The machine process greatly save time with only 40 mins operation. But results show that #IVD5435 gets lower DNA yield than #D3182D, this is because KingFisher Flex needs Carrier RNA to avoid consumable adsorption.

2~4ml plasma DNA automatic purification by MagRotex 24 Extractor

Sample	Vol.	Manual		Manual	
		Conc. ng/µl	DNA ng	Conc. ng/µl	DNA ng
Manternal	2ml	0.96	57.6	0.79	47.4
Manternal	2ml	0.97	58.2	0.78	46.8
Manternal	4ml			1.37	82.2
Manternal	4ml			1.42	85.2
Bovine	2ml	0.312	18.7	0.248	14.8
Bovine	2ml	0.318	19.08	0.273	16.4
Bovine	4ml			0.529	31.7
Bovinel	4ml			0.494	29.6



Use MaPure Circulating DNA Maxi Kit (IVD5435) extracting CFDNA from 2ml/ 4ml plasma sample. Comparing automatic extraction (Magrotex 24 Extractor) and manual extraction, Quantitate DNA by Qubit (left) and analyze DNA by Aligent 2100 (right). Results show that 2ml and 4ml plasma sample both keep a good linear relationship when using automatic extraction by Spin 24 Extractor. Comparing with manual operation, MagRotex 24 Extractor gets lower DNA yield, this is because not using Carrier RNA.

MagRotex 24 Extractor

MagRotex 24 Extractor uses innovative rotating magnetic beads resuspension technology and independent sample extraction consumables design. It can deal with large samples size (starting sample volume reach 4 ml) and complete 1~24 different nucleic acid samples rapidly at the same time. Independent consumable design ensures the independence of sample processing and avoids waste of consumable. Large touch screen and simple operations, easy to use. DNA is stored in independent elution tubes.

Features

- Large size processing - bulk sample volume processing, 0.5~4ml nucleic acid samples
- Rotary suspension - innovative rotating magnetic beads resuspension technology, avoid aerosol pollution.
- Independent consumable design - one consumable with one sample, separately, avoid cross contamination.
- Safety protection - automatic locking door, ensure the operation safety.



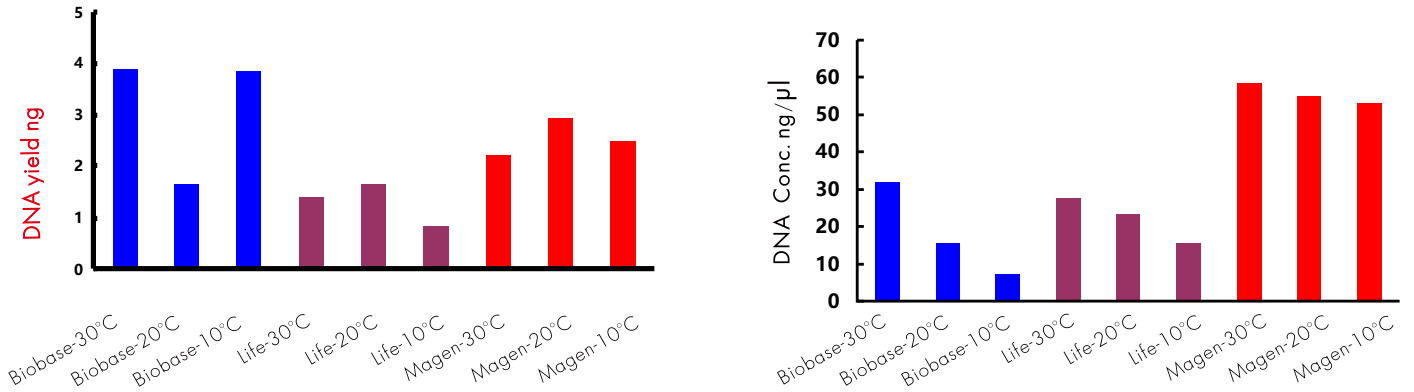
MagRotex 24 Extractor



Independent consumable

3. MagPure Circulating DNA Mini Kit---NIPT Application (0.2~1.2ml, IVD5432)

200µl maternal plasma extraction comparison (Biobase VS Life A29319 VS Magen IVD5432)



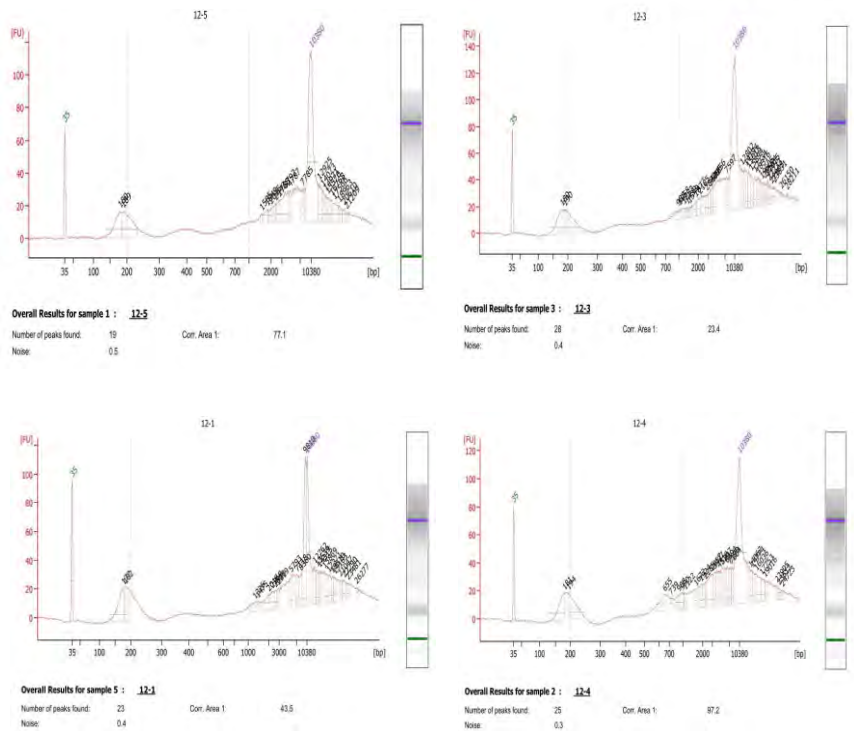
Use Biobase, Life #A29319 and Magen #IVD5432 extracting circulating DNA from 10 pregnant women's plasma sample (200µl) and operating in different temperatures (10°C/20°C/30°C), Analyze DNA concentration by Qubit (Figure Left) and quantitate DNA amount by library building (Figure Right). Results show that Magen #IVD5432 gets 12~20ng DNA from every ml plasma, much higher yield than Life #A29319. And Magen #IVD5432 gets higher DNA library concentration than other two companies. The test operated on Hamilton Pipetting workstation.

CFDNA manual extraction results for 0.3~1.2ml maternal plasma (popular size for NIPT)

Qubit results

Sample	Plasma (µL)	DNA Conc. (ng/µL)	DNA (ng)	Average (/100µL)
1	300	0.40	6.0	2.0
2	300	0.40	6.0	2.0
3	300	0.50	7.5	2.5
4	300	0.37	5.6	1.9
5	300	0.42	6.3	2.1
1	600	0.72	11.5	1.9
2	600	0.73	11.6	1.9
3	600	0.74	11.8	2.0
4	600	0.82	13.1	2.2
5	600	0.77	12.3	2.1
1	1200	1.33	22.6	1.9
2	1200	1.19	20.2	1.7
3	1200	1.36	23.1	1.9
4	1200	1.32	22.4	1.9
5	1200	1.57	26.7	2.2

Aligent 2100 results



Use MagPure Circulating DNA Mini Kit (#IVD5432) extracting circulating DNA from 5 pregnant women's plasma sample (0.3ml/0.6ml/1.2ml). Elution volume is 15~17µl. Results show that Magen #IVD5432 keeps good linear relation with 0.3ml, 0.6ml and 1.2ml plasma sample.

With the rapid development of tumor molecular biology research, collection and storage of fresh tumor samples has become a difficult problem. Formalin-fixed, paraffin-embedded (FFPE) tissue samples, preparing from human surgical tissue samples by fixation with formalin and embedding in paraffin, easily solve this problem. However, extracting DNA/RNA from FFPE samples are not easy, because chemical modifications by formaldehyde and fragmentation of the DNA during tissue processing (sampling, fixing, embedding) and storage (humidity, time, temperature) of the samples. Standard DNA/RNA isolation process often result in low DNA/RNA yield or poor performance in downstream applications (e.g., PCR). Magen R&D department has developed a variety of FFPE DNA/RNA extraction products with a special purification system. Magen also develop automatic nucleic acid purification machines going with our reagents.

Product Guide

	Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Columns	HiPure FFPE DNA Kit	D312602	50		● Isolation Total Nucleic acid from FFPE sections and Tissue	
		D312603	250			Qiagen 56404
	HiPure FFPE DNA Kit	IVD3126	100		● Isolation Total DNA from FFPE sections and tissue	
	HiPure FFPE RNA Kit	R414302	50		● Isolation total RNA from FFPE tissue and section samples	
		R414303	250			
	HiPure FFPE RNA Kit	R414402	50		● Isolation total RNA from FFPE tissue and section samples (with Dnase)	
		R414403	250			Qiagen 73504
	HiPure FFPE DNA Kit	IVD4144	50		● Isolation total RNA from FFPE tissue and section samples (with Dnase)	
	HiPure FFPE DNA/RNA Kit	IVD5116	50		● Co-isolation RNA/DNA from a singal FFPE sample	Qiagen 80234
Magnetic Beads	MagPure FFPE DNA Kit	D632301B	48		● Isolation total DNA from FFPE using high bind beads	
		D632302B	96			Omega M6958
	MagPure FFPE DNA Kit (High Pure)	D632301D	48		● Isolation high pure total DNA from FFPE using high bind beads	
		D632302D	96			
	MagPure FFPE RNA Kit	IVD3022	200		● Isolation total RNA from FFPE tissue	
	MagPure FFPE DNA/RNA Kit	IVD3026	200		● Co-isolation RNA and DNA from a single FFPE sections and tissue	
		R632701	48		● Co-isolation RNA and DNA from a single FFPE sections and tissue	
	R632702	96			Life: A31881	
	R632703	5 x 96				

FFPE DNA Automatic Isolation-MagMix 48 Extractor

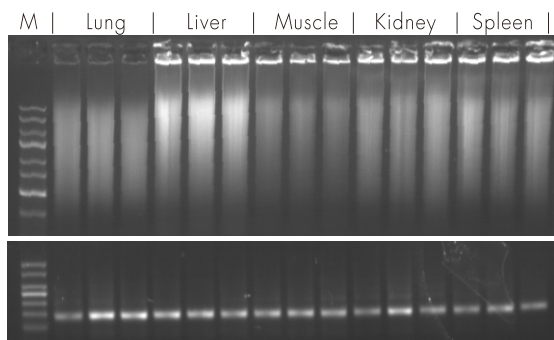
MagMix 48 Extractor uses magnetic bar flapping technology, extracting nucleic acid automatically by program settings for different samples. Including process for lysing samples, nucleic acid binding on magnetic beads, eluting, magnetic beads transfer and isolation. It can process 48(3x16) nucleic acid samples (Tissue, Plant, FFPE, Food, Microorganism, Virus, ect.) rapidly at the same time. This machine is widely used in clinical testing, routine scientific research, genomics analysis, disease control system,



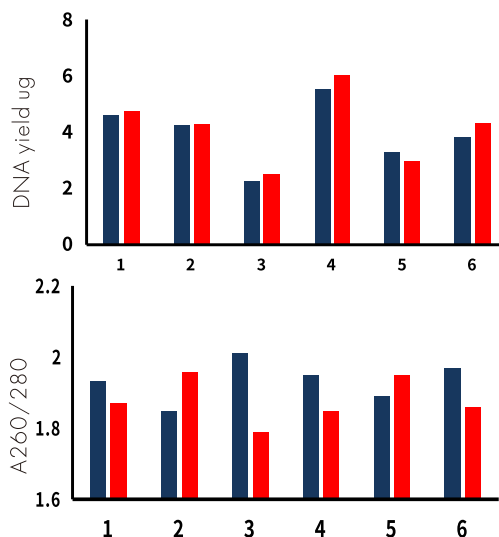
MagMix 48

- Double-hole lysing: sample size reach 600µl
- High-throughput: handle 48 samples at a time
- Simple operation: large screen, easy to use
- Complete mix: magnetic bar flapping technology

HiPure FFPE DNA Kit (D3126)-- Extract DNA from Formalin-fixed, paraffin-embedded (FFPE) tissue samples



Use HiPure FFPE DNA Kit extracting 5 different chicken FFPE tissue (5mg), then take 10% purified DNA running on 1% agarose gel (figure up). Take 1.5% purified DNA running on PCR, amplifying β -actin gene, then run on 1% agarose gel (figure down).



6 clinical FFPE tissue samples, take 5 sections from each sample. Use HiPure FFPE DNA Kit (D3126) and QIAamp FFPE DNA Kit (D56404) extracting DNA, and elute with 50ul Elution Buffer. Analyze DNA yield by Nanodrop 2000. Results show that Magen #D3126 and Qiagen #D56404 get similar DNA yield and purity.

HiPure FFPE RNA Plus Kit(R4144) Vs Qiagen RNeasy FFPE RNA Kit (73504)

Sample	Sections	Company	Nanodrop Results			Qubit Results		
			Conc.(ng/ μ l)	A260/280	A260/230	Qubit(ng/ μ l)	Vol.(μ l)	DNA(μ g)
1	2	Magen	332.4	1.8	1.2	65.2	50	3.26
	2	Qiagen	123.1	1.7	1.3	30.5	50	1.53
2	2	Magen	454.8	2.0	1.6	274	50	13.7
	2	Qiagen	343	2.1	2.1	183	50	9.2
3	2	Magen	491.3	2.0	1.2	252	50	12.6
	2	Qiagen	448	1.9	1.1	300	50	1.5
4	2	Magen	214.6	2.0	1.9	56.8	50	2.8
	2	Qiagen	156.7	1.9	1.9	50.1	50	2.5
5	2	Magen	783.7	1.9	1.9	362	50	18.1
	2	Qiagen	655.3	1.9	2.2	315	50	15.8
6	2	Magen	140.8	1.9	1.6	67.4	50	3.4
	2	Qiagen	143.5	1.8	2.0	72.3	50	3.6

6 Lung Cancer FFPE samples, use Magen #R4144 and Qiagen #73504 extracting RNA. Test RNA by Nanodrop and Qubit. Results show that Magen kit gets higher yield than Qiagen kit by both OD and Qubit data. OD 260/280 and 260/230 data show that two kits have same RNA purity.

FFPE DNA/RNA amplifying comparison (Magen IVD5116 VS Qiagen #80234)

Template	Size	Method	Sample 1		Sample 2		Sample 3	
			Magen	Qiagen	Magen	Qiagen	Magen	Qiagen
FFPE DNA	100bp	PCR	24.5	25.3	24.0	24.2	29.9	31.0
FFPE DNA	200bp	PCR	25.6	25.4	23.8	23.5	29.8	30.7
FFPE DNA	300bp	PCR	25.0	26.5	24.6	25.1	33.1	33.2
FFPE RNA	150bp	RT-PCR	22.9	22.2	22.1	21.8	23.0	23.8

Take 3 FFPE tissue samples, Co-isolating DNA and RNA by Magen IVD5116 and Qiagen #80234. Analyze DNA by Real-time PCR on 100bp, 200bp, and 300bp. Analyze RNA by Real-time RT-PCR. Data show that Magen kits and Qiagen kits get similar results.

MagPure FFPE DNA Kit (D6323B) VS Qiagen #56404

Kits	FFPE Sections	Nano ng/μl	Qubit ng/μl	DNA ng	A260/280	DNA quality
Magen	2	35.5	9.18	367	1.78	B
Qiagen	2	14.5	2.18	87	1.83	B
Magen	2	167.4	49	1960	1.83	B
Qiagen	2	61.5	12.6	504	1.83	B
Magen	2	100.3	30.2	1208	1.81	B
Qiagen	2	53.7	11.3	452	1.81	B
Magen	2	39.5	12.4	496	1.79	B
Qiagen	2	13.8	1.99	79	1.73	B
Magen	2	64.7	25	1250	1.71	2438bp
Qiagen	2	127.4	16.4	656	1.85	2345bp
Magen	2	74.1	24.5	1225	2.11	2117bp
Qiagen	2	57.7	12.9	516	1.86	1876bp
Magen	2	17.6	4.08	204	1.72	1803bp
Qiagen	2	67.1	4.64	185	1.63	1604bp
Magen	2	17.6	6.12	306	1.77	2344bp
Qiagen	2	80.6	12	480	1.82	811bp

Use Magen #D6323B and Qiagen #56404 extracting DNA from different FFPE samples (2 sections each). Analyze DNA by Nanodrop and Qubit. OD and Qubit datas show that Magen kit gets higher DNA yield and purity than Qiagen kit. DNA fragments quality from FFPE are similar for both kits. (This test is provided by two famous biology companies using Magen kits.)

FFPE DNA extraction

Cross contamination test for MagMix 48 Extractor

96 Plate hole	Sample type	SRY Gene	96 Plate hole	Sample type	SRY Gene
A1	Male	CT: 22.7	A7	Male	CT: 23.6
B1	Female	CT: no	B7	Female	CT: no
C1	Male	CT: 23.2	C7	Male	CT: 18.9
D1	Female	CT: no	D7	Female	CT: no
E1	Male	CT: 25.3	E7	Male	CT: 24.8
F1	Female	CT: no	F7	Female	CT: no
G1	Male	CT: 23.2	G7	Male	CT: 19.6
H1	Female	CT: no	H7	Female	CT: no

Take 8 male and female tumour FFPE tissue samples (2 sections each), extract DNA by MagPure FFPE DNA Kit (D6323B) and MagMix 32 Extractor for automatic nucleic acid extraction. Cross adding male and female samples on the machine. Amply SRY gene for the DNA by real-time PCR. PCR results show no amplification on femal samples. So MagMix 32 Extractor keeps no cross contamination for different samples.

Clinical samples extraction results by MagPure FFPE DNA/RNA Kit (R6327)

sample No.	Qty		Conc. ng/μl	A260/A280	Qubit ng	Fragment bp	sample No.	Qty		Conc. ng/μl	A260/A280	Qubit ng	Fragment bp
1	1	DNA	28.4	1.8	443	7500-15000	11	1	DNA	29	1.8	520	15000
		RNA	18.7	2.0	440				RNA	10.4	2.1	97	
2	3	DNA	6.7	1.9	37	7500-15000	12	3	DNA	68	1.8	1965	250-5000
		RNA	5.1	2.1	61				RNA	64.5	1.9	1188	
3	4	DNA	18.1	2.0	280	5000-15000	13	3	DNA	56.4	1.8	2513	15000
		RNA	9	2.1	213				RNA	78.7	2.0	2150	
4	6	DNA	21.8	1.8	348	5000-15000	14	4	DNA	61.2	1.8	547	250-7500
		RNA	11.9	2.1	272				RNA	220.8	2.0	3500	
5	7	DNA	19.4	1.8	307	5000-15000	15	4	DNA	49.8	1.8	347	1000-15000
		RNA	8.3	2.0	204				RNA	8.8	1.8	162	
6	8	DNA	36.2	1.8	670	7500-15000	16	4	DNA	202.4	1.8	3325	2500-15000
		RNA	25.4	2.1	492				RNA	78	1.8	3430	
7	1	DNA	44	1.8	642	2000-15000	17	5	DNA	220.7	1.9	2933	5000-15000
		RNA	22.9	2.0	480				RNA	82.5	2.0	1725	
8	1	DNA	103.4	1.8	1450	5000-15000	18	7	DNA	40.3	1.8	2261	15000
		RNA	11.7	2.3	85				RNA	18.2	1.9	347	
9	1	DNA	55	1.9	2450	5000-15000	19	8	DNA	20.3	1.9	233.25	5000-15000
		RNA	56.7	1.9	875				RNA	6.8	2.1	137	
10	1	DNA	29.4	1.9	1428	15000	20	9	DNA	12.2	1.8	66	5000-15000
		RNA	30.5	2.1	798				RNA	3.1	2.3	73	

Different clinical FFPE samples extracted by MagPure FFPE DNA/RNA Kit (R6327), and analyze by Nanodrop and Qubit.

Molecular detection and diagnosis has become a mainstream trend as fast development of molecular biology. Genomic DNA/RNA extractions from different Tissue/Cells/Blood samples uses widely in research and diagnostic areas. Magen R&D department developed various products from the previous samples to subsequent extractions of DNA/RNA. We supply a complete set of solutions for Tissue/Cells/Blood DNA/RNA extraction includes column extraction, automatic extraction and solutions design for high-throughput sequencing genomic extraction.

Product Guide

Columns

	Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Universal	HiPure Universal DNA Kit	D301802	50		● Isolation total DNA from tissue / blood / body fluid / swab /dry blood spots	
		D301803	250			
	HiPure Universal DNA Kit	IVD3018	100		● Isolation total DNA from tissue / blood / body fluid / swab /dry blood spots	
	HiPure Tissue&Blood DNA Midi Kit	D311302	20		● Isolation total DNA from 2ml blood and 200mg tissue	Qiagen51183
		D311303	100			
	HiPure Tissue&Blood DNA Maxi Kit	D311502	10		● Isolation total DNA from 10ml blood and 1g tissue	Qiagen51192
		D311503	50			
	HiPure Tissue&Blood DNA 96 Kit	D311702	1 x 96		● Isolation total DNA from 200µl blood, tissue, culture cells, swab using 96 well bind plate	Qiagen69581
		D311703	4 x 96			
HiPure DNA Micro Kit	D312502	50		● Isolation total DNA from 1-10µl blood, <2mg tissue and other samples	Qiagen56304	
	D312503	250				
HiPure Universal RNA Kit	R413002	50		● Isolation total RNA from 100mg lipid tissue, tissue, cell, plant, body fluids using columns and MagZol reagent	Qiagen74804	
	R413003	250				
Blood/Body fluids	HiPure Blood DNA Mini Kit	D311102	50		● Isolation total DNA from 200µl whole blood, buffy coat, body fluids	Qiagen51104
		D311103	250			
	HiPure Blood RNA Mini Kit	R416102	50		● Isolation total RNA from 1-1.5ml whole blood	Qiagen52304
		R416103	250			
	HiPure Liquid RNA (miRNA) Kit	R416302	50		● Isolation total RNA from 0.25ml body fluids	Qiagen217184
		R416303	250			
HiPure Paxigene Blood RNA Kit	D416802	10		● Isolation total RNA from Paxigene tubes	Qiagen762164	
	D416803	50				
Tissue/Cells	HiPure Tissue DNA Kit	D312102	50		● Isolation total DNA from 30mg tissue, culture cells, FTA card	Qiagen51304
		D312103	250			
	HiPure Total RNA Kit	R401102	50		● Isolation total RNA from 20mg tissue, 150 mg plant, 5 x 10 ⁶ cell using one column	Qiagen74104
		R401103	250			
	HiPure Total RNA Plus Kit	R411102	50		● Isolation total RNA from 20mg tissue, 150 mg plant, 5 x 10 ⁶ cell using two column (gDNA removed column)	Qiagen74134
		R411103	250			
	HiPure Total RNA Kit	IVD4121	50		● Isolation total RNA (miRNA) from tissue, cell using two columns and DNase Plus	

Product Guide

Magnetic beads

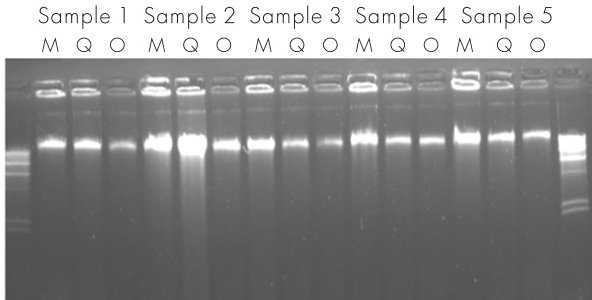
	Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Universal	MagPure DNA Micro Kit	IVD3101	200		● Isolation total DNA from 1-100µl blood, FFPE, tissue and other samples	
	MagPure Universal DNA Kit	IVD3102	200		● Isolation total DNA from blood, buffy coat, tissue and other samples	
	MagPure Universal RNA Kit	IVD3020	200		● Isolation total RNA from blood/tissue/cells using magnetic beads	
Blood/Body fluids	MagPure Fast Blood DNA Kit	D631001	48		● Isolation total DNA from 200µl whole blood, buffy coat, body fluids	
		D631002	96			
		D631003	480			
	MagPure Blood DNA Kit	D631101	48		● Isolation total DNA from 200µl whole blood, buffy coat, body fluids	Qiagen940054
		D631102	96			
		D631103	480			
	MagPure Blood RNA Kit	D661101	48		● Isolation total RNA from 200-300µl blood, buffy coat, body fluids	
D661102		96				
D661103		480				
Tissue/Cells	MagPure Total RNA Kit	D662201	48		● Isolation total RNA from tissue and cells	
		D662202	96			
		D662203	5 x 96			

Purchase Guide

Name	CAT NO	Whole blood Sample amount	Leukocyte protocol*	Column type	Elution volume	Average yield (Whole blood)	Time per run
HiPure Blood DNA Mini Kit	D3111	10-250µl	1 ml	1.5ml column	30~100µl	5-9µg/200µl	25 min
HiPure Tissue& Blood DNA Midi Kit	D3113	0.2-2ml	10ml	15ml column	0.5~1.0ml	20-40µg/1ml	45 min
HiPure Tissue& Blood DNA Maxi Kit	D3115	3-10ml	10ml	50ml column	1~2ml	20-40µg/1ml	45 min
HiPure Tissue& Blood DNA 96 Kit	D3117	1-200µl	1ml	96 well plate	100~150µl	3-8µg/200µl	70 min

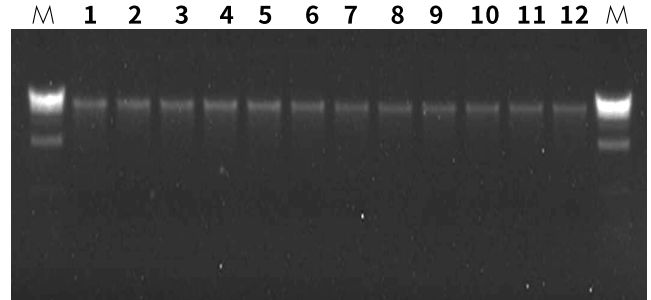
* Note: Leukocyte protocol can be used when large volume whole blood samples need to be processed. Whole blood was treated with red blood cell lysate, and white blood cells were obtained by centrifugation before extraction

HiPure Universal DNA Kit (D3018) comparing with other brands



Use Magen HiPure Universal DNA Kit (D3018), Qiagen Kit and Omega Kit extracting 5 fresh human blood samples (200µl). Take 5% genomic DNA analyzing on 0.8% agarose gel. Results show that Magen kit get higher DNA yield.

Test results for HiPure DNA Micro Kit (D3125)(10µl blood)



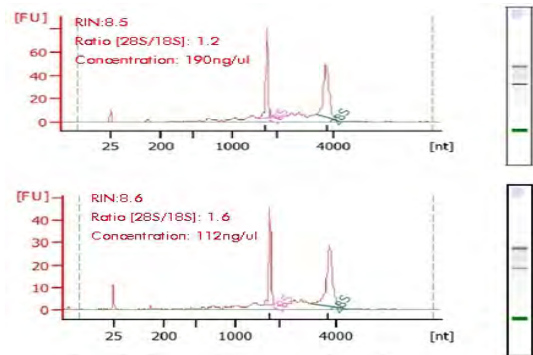
Use HiPure DNA Micro Kit extracting 10 fresh human blood samples(10µl). Take 50% purified DNA analyzing on 0.8% agarose gel. Results show that Magen kit gets stable and high yield DNA for micro size blood samples.

Test results for HiPure Blood DNA Midi Kit(D3113)

Blood	A260/280	A260/230	Yield(µg)
2 ml	1.82	1.92	60.9
2 ml	1.86	2.16	60.6
2 ml	1.92	1.99	38.9
2 ml	1.90	1.91	41.9
2 ml	1.78	2.08	45.8
2 ml	1.88	2.28	46.8
2 ml	1.82	2.12	45.1
2 ml	1.83	2.33	50.6

Use HiPure Blood DNA Midi Kit (D3113) extract 10 anticoagulant blood (2ml), and analyze DNA quality by Thermo Nanodrop 2000. Results show Magen kit gets high purity and high yield DNA from blood.

Test results for HiPure PX Blood RNA Kit(R4168)



Take 2 fresh blood samples (2ml), store in Paxigene Tube (Qiagen) for one week, then extract RNA by HiPure PX Blood RNA Kit. And analyze RNA quality by Aligent 2100. Results show Magen kit get high integrality of RNA from Paxigene tube.

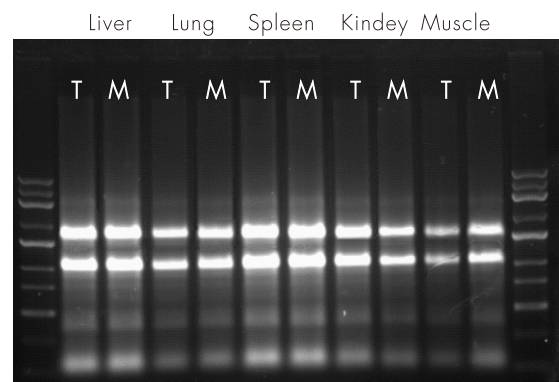
HiPure Universal RNA Mini Kit (R4130) & MagZol Reagent (R4801) High purity total RNA extraction kit and reagent

RNA extraction results for different clinical samples

Sample	RNA µg	Conc µg/µl	RIN	28S/18S
Heart vales 1	1.52	38	8.0	1.9
Heart vales 2	2.42	80	7.4	1.3
Mesentery 1	4.13	129	8.1	1.8
Mesentery 2	0.73	23	8.2	1.6
Leaf fat 1	0.93	32	8.3	1.5
Leaf fat 2	1.23	41	8.3	1.5
Liver 1	31	1203	8.3	1.5
Liver 2	42	1158	8.3	1.5
Kidney 1	12	470	8.9	1.8
Kidney 2	10.8	401	9.1	1.6
Intestine 1	8.7	134	8.7	1.6
Intestine 2	8.9	178	8.9	1.6

Use HiPure Universal RNA Kit (R4130) extracting total RNA from 6 different clinical tissue samples. Quantitate RNA by Thermo Nanodrop 2000 and analyze RNA integrality by Aligent 2100.

MagZol Reagent Vs Trizol Reagent

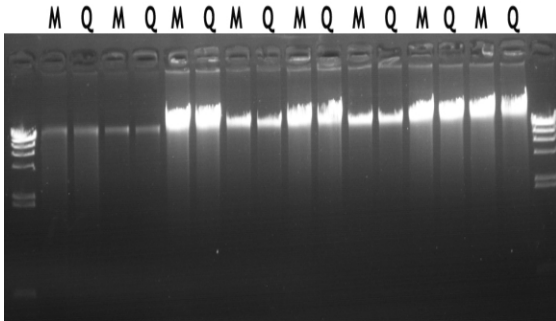


T: Trizol (Life company) M: Magzol Reagent

Use MagZol Reagent (R4801) and Life Trizol Reagent (15596026) extracting RNA from 5 different tissues of mouse. Take 1% RNA analyzing on 1% agarose gel. Results show that two reagents get smiliar RNA yield.

MagPure Universal DNA Kit (IVD3102) Extract DNA from tissue/cells/blood/saliva samples by magnetic beads

Blood DNA extraction-- MagPure Universal DNA Kit Vs Qiagen BioSprint Blood DNA Kit



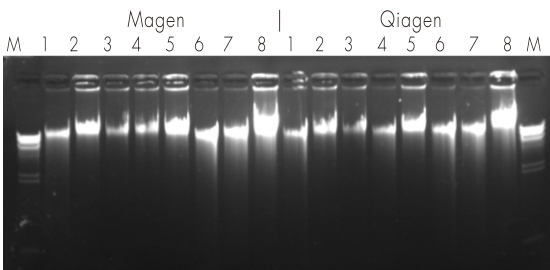
Use MagPure Universal DNA Kit and BioSprint Blood DNA Kit(Qiagen) extracting 8 blood samples (200ul). Take 5% DNA analyze on 0.8% agarose gel. Machine used: KingFisher Flex

Dry blood spot DNA extraction results Magen(IVD3102) Vs Tiangen (DP344)

Company	Blood spot 5mm	Qubit		Nanodrop		DNA (ng)
		Conc ng/μl	Conc ng/μl	A260/A280	A260/A230	
Tiagen	1 pcs	5.3	15.2	1.6	0.7	265
Tiagen	1 pcs	6.8	14.6	1.5	0.8	340
Tiagen	1 pcs	6.4	16.0	1.6	1.1	320
Tiagen	1 pcs	6.5	17.2	2.0	1.1	325
Magen	1 pcs	8.4	11.0	1.8	1.4	420
Magen	1 pcs	8.4	10.6	1.8	1.5	420
Magen	1 pcs	8.6	10.6	1.8	1.5	430
Magen	1 pcs	9.3	10.9	1.8	1.5	465

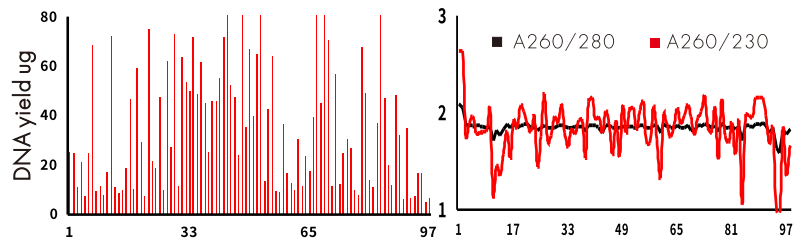
Take 8 pcs of 5mm dry blood spots (about 5ul blood/pcs), extracting DNA by MagPure Universal DNA Kit and Tiagen kit. And analyze DNA by Nanodrop and Qubit.

Tissue DNA extraction MagPure Universal DNA Kit Vs Qiagen Biosprint Tissue DNA Kit



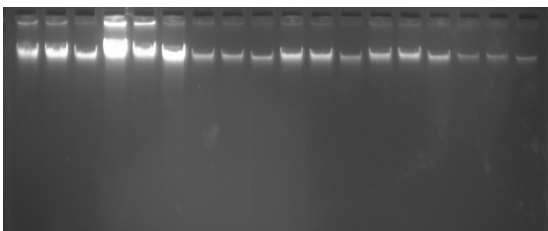
Use MagPure Universal DNA Kit and BioSprint Tissue DNA Kit (Qiagen) extracting DNA from 8 different tissues of mouse (10mg). Take 5% DNA analyzing on 0.8% agarose. Extraction machine: KingFisher Flex
 1: ear, 2: kidney, 3:skin, 4: tail, 5: liver, 6: spleen, 7: heart, 8:lung

Pig tail DNA extraction results

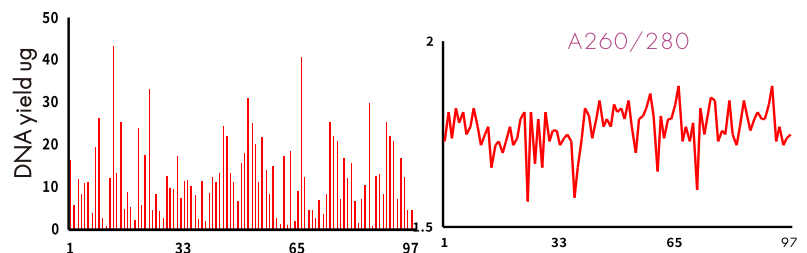


96 pig tail samples extracted by MagPure Universal DNA Kit, and analyze DNA on Nanodrop. In the results, 80% samples get DNA yield above 10μg, and about 5% samples get 3~10μg. 95% DNA A260/280: 1.75~1.90. A260/230: 1.4~2.2. 100% success for downstream applications. Extraction machine: KingFisher Flex

Salive DNA extraction -- flexible sample size, wide use



18 fresh salive samples (300μl include storage buffer) extract DNA by MagPure Universal DNA Kit. And take 5% DNA analyze on 0.8% agarose gel. Extraction machine: KingFisher Flex



96 salive samples (300μl include storage buffer) store for 2 months, extract DNA by MagPure Universal DNA Kit on KingFisher Flex. And anzlyze DNA quality by Nanodrop. In the results, 80% samples get DNA yield above 5μg, and 5% samples get 0.5~1ug. 95% DNA A260/280: 1.71~1.85. About 2~5% DNA A260/280 < 1.7.

Magen supply two series of viral/pathogen nucleic acid extraction kits, HiPure and MagPure. HiPure Viral Nucleic Acid Kits based on silica spin column technology, extract viral/pathogen DNA/RNA from plasma, serum, non-cells viral, ect biology samples rapidly. Users can get DNA/RNA from different samples in 30 min. Process contains lysis, column combining, elution, and at last get DNA/RNA by nuclease-free water elution.

MagPure viral/pathogen nucleic acid kit uses magnetic beads technology getting viral/pathogen DNA/RNA from different source of biology samples in high-throughput. It can be used with both manual operation and automatic extraction workstation like BeckMek Tican, Hamilton, Cliper, Abbott M2000, Etc. Magen also design pre-mixed reagent kits specially for KingFisher and Magen automatic extraction machines. During covid-19, Magen had supplied **over 100 million preps** viral kits all over the world, which manifested the reliability and stability of the product.

Product Guide

	Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Column	HiPure Pathongen DNA/RNA Kit (mNGS)	IVD4179	50		● Extract Pathogen RNA/DNA from 1ml whole blood, plasma, etc. for mNGS downstream application, remove host background nucleic acid.	
	HiPure Viral RNA Kit	R417102	50		● Extract viral RNA from 140µl non-cell/low cell content biological samples such as serum and plasma	Qiagen52904
	HiPure Viral RNA/DNA Kit	R417103	250		● Extract viral RNA/DNA from 200µl non-cell/low cell content biological samples such as serum and plasma	Qiagen57704
	HiPure Viral RNA Kit	IVD4173	100		● Rapid Extract viral RNA/DNA from 200µl non-cell/low cell content biological samples such as serum and plasma	
Magnetic Beads	MagPure Viral DNA/RNA Kit	IVD5412	200		● Extract viral DNA/RNA from 200µl non-cell/low cell content biological samples such as serum and plasma by magnetic beads	Life:Am 18365
	MagPure Pathongen DNA/RNA Kit	IVD6672	200		● Extract total pathogen from non-cell/low cell content biological samples for PCR downstream application	Life: A36716
	MagPure Pathongen DNA/RNA Kit B (mNGS)	R667202B	96		● Extract total pathogen from 0.5ml non-cell/low cell content biological samples for mNGS application, remove host background nucleic acid.	
	MagPure Pathongen DNA/RNA Kit C (mNGS)	R667202C	96		● Extract total pathogen from 0.5-1.5ml biological samples such as whole blood, body fluid, tissue homogenate. for mNGS application, remove host background nucleic acid.	
Precast Kit	MagPure Viral DNA/RNA Kit	R666801	48		● Extract viral DNA/RNA from 2-4ml non-cell/low cell content biological samples such as serum and plasma. Magnetic Kit for Blood Screening.	
	MagPure Viral DNA/RNA Kit	IVD5412-F-96	96		● Pre-packed Kit for 96 channel machine (Kingfisher Flex, MagMix 96)	
	MagPure Viral DNA/RNA Kit	IVD5412-TL-96	96		● Pre-packed Kit for 32/48 channel machine (MagMix 32/48)	

Virus Nucleic Acid Isolation Automatic Solution: MagMix 32 Extractor

MagMix 32 Extractor uses magnetic bar flapping and transferring technology, extracting nucleic acid automatically by program settings for different samples. Including process for lysing samples, nucleic acid binding on magnetic beads, eluting, magnetic beads transfer and isolation. It can process 1-32 nucleic acid samples (Tissue, Plant, Blood, Body fluid, Food, Pathogenic Microorganism, ect.) rapidly at the same time. This machine is widely used in clinical testing, routine scientific research, genomics analysis, disease control system, food safety inspection, forensic identification, ect.

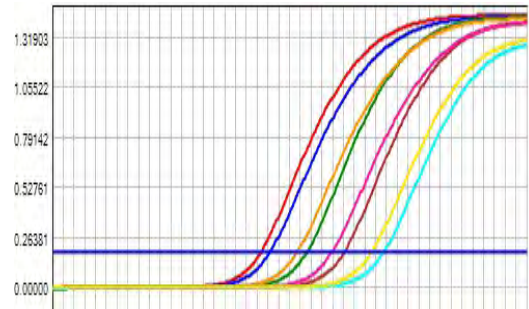
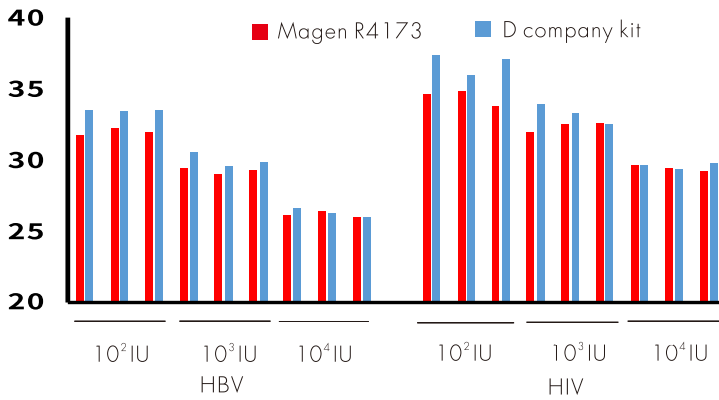


MagMix 32 Extractor



Pre-mixed reagents, only need to add sample

HiPure Viral DNA/RNA Kit (R4173) Column Kits



Add 10² IU, 10³ IU, 10⁴ IU HBV or HIV viral into 3 negative blood samples, extract viral DNA/RNA by Magen HiPure Viral DNA/RNA Spin Kit and D company kit. Then analyze DNA/RNA by real-time PCR with Daan company virus detection kit. Test result show that Magen kit has lower CT value than D company. Magen kit gets higher DNA/RNA yield.

Take 4 gradient HCV blood samples (10² IU, 10³ IU, 10⁴ IU and 10⁵ IU), extract nucleic acid by Magen HiPure Viral DNA/RNA Kit and D company kit. Then analyze extracted nucleic acid by real-time PCR with Daan company virus detection kit. Test results show that Magen kit has low CT value than D company. Magen kit gets higher DNA/RNA yield.

MagPure Viral DNA/RNA Kit (IVD5412) Magnetic Kits

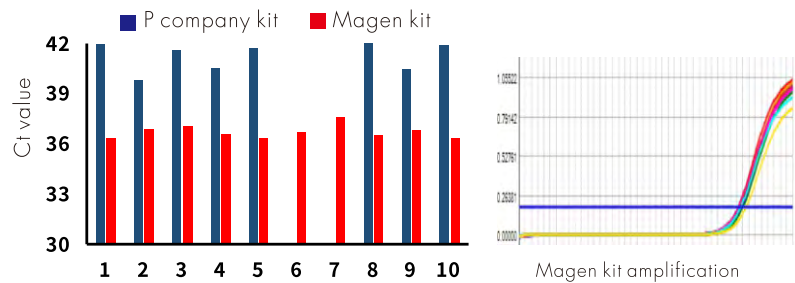
MagPure Viral DNA/RNA Kit VS Roche COBAS

Sample	Magen	Roche
1	97600	32650
2	12200	3198
3	12100	3473
4	non	non

HBV quantitative test results

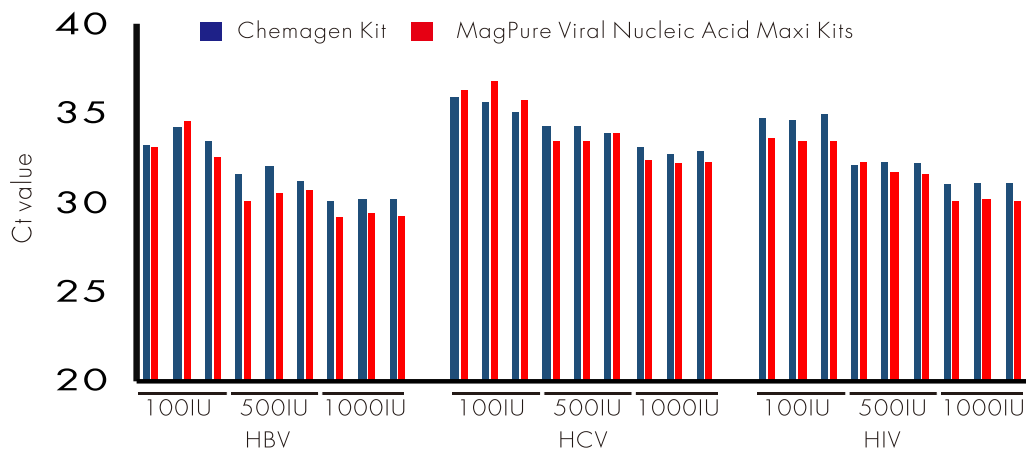
Use Magen MagPure Viral DNA/RNA Kit and Roche COBAS extract DNA/RNA from 4 HBV samples (0.2ml). Then analyze Viral Load by real-time PCR with Daan company HBV detection kit. Results show Magen kit has higher Viral Load than Roche, Magen kit gets higher DNA/RNA yield.

Detection for low virus contraction (50IU/ml)



Take 200ul low copy HBV sample (50IU/ml), extract viral nucleic acid by Magen MagPure Viral DNA/RNA Kit and P company kit, and repeat 10 times. Then analyze viral load by Promega HBV detection Kit. Magen get 100% success on 10 samples, repeatability (ct value: CV%=1.4%, concentration: CV%=5.17%). P company get about 70% success, repeatability (ct value: CV%=2.14%, concentration: CV%=15.0%).

MagPure Viral Nucleic Acid Maxi Kit (R6668) Magnetic Kits for Blood Screening



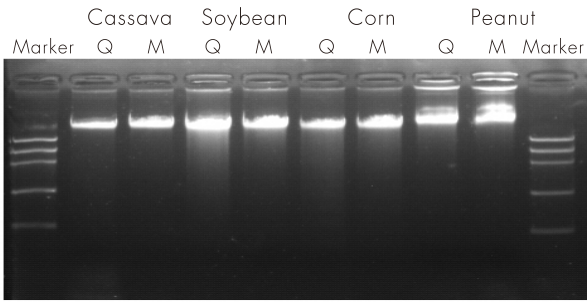
Add 100 IU, 500 IU and 1000 IU of HBV/HCV/HIV into 9 negative blood samples (2.4ml). Use Magen MagPure Viral Nucleic Acid Maxi Kit and Chemagen Viral Nucleic Acid Maxi Kit extract viral nucleic acid on Da3300 platform. Then detect viral nucleic acid by Real-time PCR with Daan company HBV, HCV, HIV detection kits. Test results show Magen kit has lower CT value than Chemagen kit. So Magen kit has higher nucleic acid yield.

Molecular plant breeding technology, select plant traits gene or genotype directly by nucleic acid, combine phenotype and genotype section, make efficient combination and directly selection of genome. This technology greatly improves the efficiency and accuracy of breeding. Magen has developed various products for plant DNA/RNA extraction. Safe plant DNA/RNA extraction kit (non phenol chloroform extraction), general plant DNA/RNA extraction kit for complicated samples such as polysaccharide polyphenol, customized magnetic beads kits (MagPure) suitable for Flap 32/48, KingFisher, ect automatic nucleic acid purification platform. Magen Plant DNA/RNA Extraction kits are widely used for conventional plant, commercial crops, seeds DNA/RNA extractions.

Product Guide

	Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Column	HiPure HP Plant DNA Maxi Kit	D316302	10		● Isolation total DNA from 3g plant and fungal tissue	
		D316303	50			
	HiPure SF Plant DNA Kit	D316402	50		● Isolation total DNA from 100mg simple plant without chloroform	Qiagen69104
		D316403	250			
	HiPure SF Plant DNA 96 Kit	D316702	4x96		● Isolation total DNA from 50mg simple plant using 96 well bind plate without chloroform	Qiagen69181
		D316703	20x96			
	HiPure Plant DNA Mini Kit	D318702	50		● Isolation total DNA from 1.50mg plant and fungal tissue	
		D318703	250			
	HiPure Fruit RNA Kit	R401402	50		● Isolation total RNA from 150mg fruit or seed using Plantzol reagent	
		R401403	250			
HiPure Plant RNA Kit	R415102	50		● Isolation total RNA from 150mg plant using two columns (gDNA removed column)	Qiagen74904	
	R415103	250				
HiPure Plant RNA Midi Kit	R415202	20		● Isolation total RNA from 1g plant using two Midi columns (gDNA removed column)		
	R415203	100				
Magnetic beads	MagPure Plant DNA Kit	D635101	48		● Isolation total DNA from 50-100mg plant, fungal tissue	
		D635102	96			
		D635103	5x96			
	MagPure Seed DNA Kit	D635201	48		● Isolation total DNA from 50-100mg easy-grinded plant (tender leaf) and seed	
		D635202	96			
		D635203	5x96			
	MagPure Plant RNA Kit	D664101	48		● Isolation total RNA from 50mg plant using magnetic particles	
D664102		96				
		D664103	480			

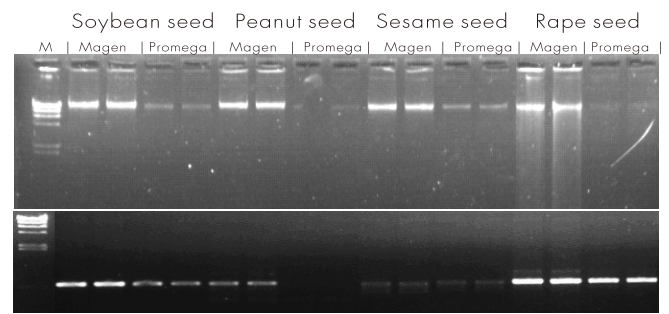
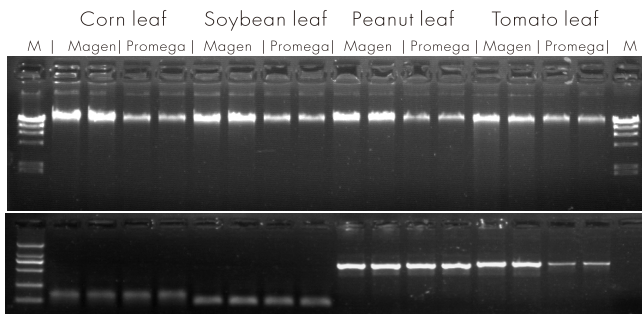
HiPure SF Plant DNA Kit (D3164) Vs Qiaamp DNeasy Plant Kit (69104)



Sample	A260/280	A260/230	Yield (µg)	Company
Cassava	1.84	1.74	7.2	Qiagen
Cassava	1.85	1.43	7.7	Magen
Soybean	1.87	2.22	8.1	Qiagen
Soybean	1.83	1.99	9.7	Magen
Corn	1.82	2.10	5.6	Qiagen
Corn	1.84	2.25	6.4	Magen
Peanut	1.94	2.14	18.3	Qiagen
Peanut	1.94	2.29	20.4	Magen

Use Magen HiPure SF Plant DNA Kit and Qiagen Plant DNA Kit extract DNA from 4 different plant leaves. Take extracted DNA (5µl) running on 1% agarose gel. Analyze DNA yield and purity by Nanodrop. Test results show Magen and Qiagen kits get similar quality.

MagPure Seed DNA Kit (D6352) Vs Promega Wizard Magnetic Plant DNA Kit



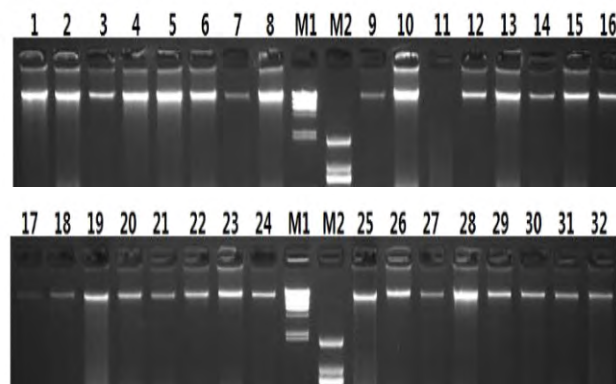
Use MagPure Seed DNA Kit and Promega Wizard Magnetic Plant DNA Kit extract DNA from 4 different plant leaves and seeds. Take extracted DNA (5µl) running on 1% agarose gel. Results show Magen kit gets better DNA yields.

MagPure Plant DNA Kit - Fast/Simple/High-throughput plant DNA extraction

Case for high throughput tobacco leaf DNA extraction: take 50~150mg tobacco leaf into 2ml thick wall Eppendorf tube and add 2 grinding beads and 800µl Buffer SOL/2µl RNase Solution. Transfer the tube to grinding machine, grind 30 sec on 50HZ and repeat once. Take out sample and stay in 65~70°C oven for 10~15 min. Centrifuge 3 min at 10,000~13,000 x g. Transfer 400µl supernatant into deep hole plate of KingFisher Flex machine and follow the instructions. Over one thousand samples can be process in a day using with KingFisher Flex machine.

A260/230	A260/280	Yield(µg)
1.42	1.82	5.50
1.52	1.81	4.50
1.42	1.81	11.5
1.56	1.78	9.8
1.61	1.75	8
1.01	1.8	8.6
1.32	1.81	8.9
1.56	1.83	5
1.48	1.82	5.6
1.68	1.78	7.5
1.52	1.75	8.5
1.43	1.86	16.5
1.52	1.89	13.2
1.4	1.72	15
1.38	1.85	7.2
1.26	1.8	6.5

Innovated wet grinding technology, without liquid nitrogen, safe and fast



Take 32 DNA (5µl) extracted from tobacco leaf analyzing on 1% agarose gel. Results show that DNA extracted by wet grinding process keeps good quality, no degradation.

Microbes and their metabolites directly or indirectly affect human health. Study and analyze microbial characteristics of soil/stool/water is important to provide guidance to human health and environmental protections. Microbes have great difference between species and impurities, so it is difficult to extract microbial nucleic acid with standard kits. Magen R&D has developed various kinds of kits for different samples with high quality inhibitor removing solutions. Magen kits includes Bacterial/Fungal Yeast/Stool/Soil/Water/ samples DNA/RNA extraction by column extraction (HiPure) or high throughput magnetic beads extraction (MagPure).

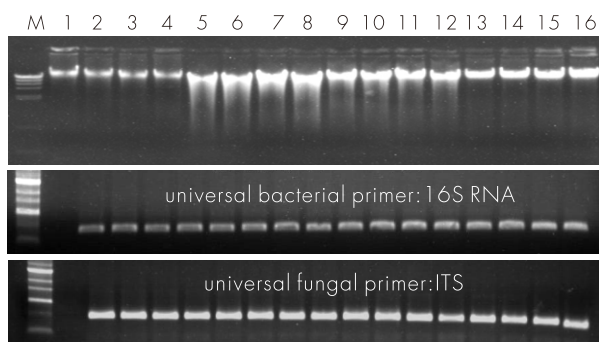
Product Guide

	Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Column	HiPure Stool DNA Kit	D314102	50		● Isolation total DNA from 50-100mg stool samples	
		D314103	250			
	HiPure Soil DNA Kit	D314202	50		● Isolation DNA from 200-500mg soil sample	Qiagen47014
		D314203	250			
	HiPure Soil/Stool DNA 96 Kit	D314401	1x96		● Isolation DNA from 200-500mg soil, 50-100mg stool, or 100-500mg other environmental samples using 96 Plate	Qiagen47017
		D314402	4x96			
		D314403	20x96			
	HiPure Bacterial DNA Kit	D314602	50		● Isolation bacterial DNA from cultures, food and other samples	
		D314603	250			
	HiPure Microbiome DNA Kit	D314802	50		● Isolation gDNA from biological sample and remove host DNA	Qiagen51704
D314803		250				
Column	HiPure Microbial RNA Kit	R418202	50		● Isolation total RNA from bacteria, yeast cells	
		R418203	250			
	HiPure Soil RNA Kit	R418302	50		● Isolation total RNA from 500mg soil sample	Qiagen12866
		R418303	250			
	HiPure Stool RNA Kit	R418502	50		● Isolation total RNA from 200mg stool sample	
		R418503	250			
Magnetic beads	MagPure Bacterial DNA Kit	D513101	48		● Isolation total DNA from bacterial culture	
		D513102	96			
		D513103	480			
	MagPure Soil DNA Kit	D635601	48		● Isolation total DNA from 250-500mg soil	Qiagen47109
		D635602	96			
		D635603	480			
	MagPure Stool DNA Kit	D636401	48		● Isolation total DNA from 100-150mg stool samples	
		D636402	96			
		D636403	480			

HiPure Soil Nucleic Acid Kits

HiPure Soil Nucleic Acid Kits use silica spin column purification technology and unique humic acid adsorbents, extract high purity and high yield DNA/RNA rapidly from different soil or environmental samples, including fungal, bacterial, and other microbial DNA/RNA.

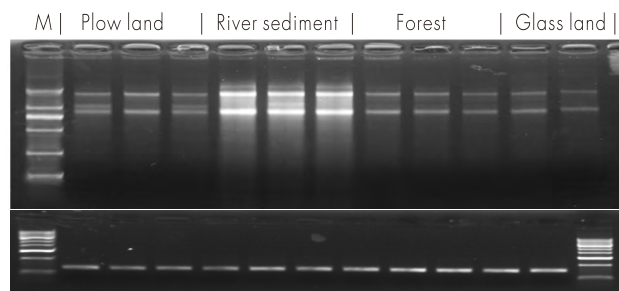
HiPure Soil DNA Kit (D3142)



Extract DNA from 16 different soil samples (50mg) by HiPure Soil DNA Kit. Take 10% DNA analyze on 0.8% agarose gel. M: Lambda DNA/Hind III Marker. Take 2% DNA as template, amplify bacterial 16S RNA and fungal ITS gene by PCR, then analyze DNA (5µl PCR mixtur) on 1.8% agarose gel. M: DL2000 DNA Marker.

Lane 1~4: soil from river sediment
Lane 5~8: soil from different forest
Lane 9~12: soil from glass land
Lane 13~16: soil from plow land

HiPure Soil RNA Kit (R4183)



Extract RNA from 4 different soil samples (500mg) by HiPure Soil RNA Mini Kit. Take 15% RNA analyze on 1% agarose. M: DL5000 DNA Marker

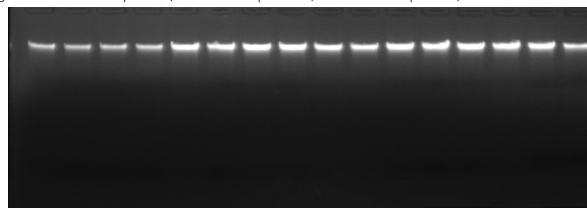
MagPure Soil DNA Kit(D6356)

MagPure Soil DNA Kits use magnetic bead purification technology and unique humic acid adsorbents, extract high purity and yield DNA/RNA rapidly from different soil or environmental samples, including fungal, bacterial and other microbial DNA/RNA. Kits can be used with different automatic nucleic acid purification machines like KingFisher Flex.

Test of Magen D6356 working with Kingfisher Flex

A260/230	A260/280	Conc ng/ul	DNA ug	Program
1.2	1.6	33.7	4.0	single hole
1.2	1.7	32.4	3.9	supernatant: 1 x 400µl
1.2	1.7	38.9	4.7	magnetic bead: 1 x 40µl
1.3	1.6	40.3	4.8	
1.1	1.7	69.9	8.4	double hole
1.5	1.7	72.5	8.7	supernatant: 2 x 400µl
1.5	1.8	83.2	10.0	magnetic bead: 1 x 40µl
1.4	1.7	83.5	10.0	
1.4	1.9	60.6	7.3	double hole
1.4	1.7	63.5	7.6	supernatant: 2 x 400µl
1.4	1.7	89.6	10.7	magnetic bead: 2 x 40µl
1.3	1.7	96.4	11.6	
1.5	1.7	86.0	10.3	double hole
1.4	1.7	80.9	9.7	supernatant: 2 x 400µl
1.5	1.6	64.3	7.7	extract by spin column
1.4	1.7	56.1	6.7	

Extraction: magnetic magnetic magnetic spin column
Sample: single double double double
Magnetic: 40µl | 40µl | 2x40µl | 1 column |

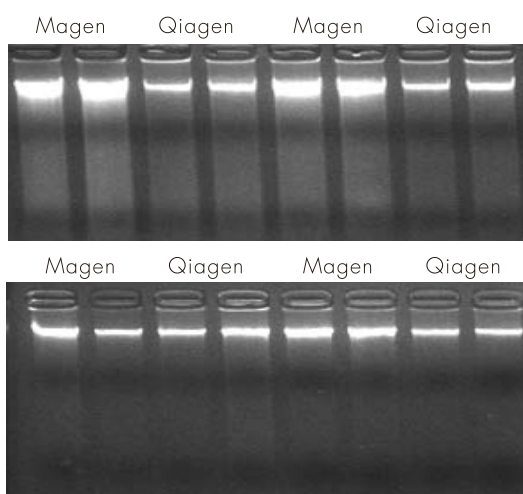


Use Magen MagPure Soil DNA Kit lyses one soil sample, get supernatant and extract DNA on KingFisher Flex. This test goes with two programs and control by Magen column extraction kit (D3142).

MagPure Stool DNA Kit (high-throughput extraction)

MagPure Stool DNA Kit is based on magnetic beads extraction and specially design for high-throughput soil DNA extraction. It can rapidly extract high purity DNA from different stool samples, including fungal, bacterial, and other microbial DNA. Extraction can be finished in 60 min with mutiple samples. Purified DNA can be directly used for downstream applications as PCR, Real-time PCR Enzyme digestion, Southern blot. MagPure Stool DNA Kit is widely used with KingFisher machines.

MagPure Stool DNA Kit (D6364) Vs QIAamp Fast Stool DNA Kit (51604)



Kits	A260/230	A260/280	Conc (ng/μl)	DNA μg
Magen	1.4	1.8	179.7	14.4
	1.7	1.8	211.3	16.9
Qiagen	1.1	1.7	146.0	11.7
	1.4	1.8	147.0	11.8
Magen	1.2	1.8	173.5	13.9
	1.6	1.8	143.6	11.5
Qiagen	1.1	1.8	110.9	8.9
	1.2	1.8	143.8	11.5
Magen	1.4	1.6	83.3	6.7
	1.6	1.7	102.0	8.2
Qiagen	1.1	1.6	48.1	3.8
	1.5	1.6	59.6	4.8
Magen	1.1	1.7	99.0	7.9
	1.5	1.7	60.1	4.8
Qiagen	0.9	1.7	77.7	6.2
	1.4	1.6	55.0	4.4

Use Magen Stool DNA Kit (D6364) and Qiagen Fast Stool DNA Kit (51604) extract DNA from 8 fresh human stool sample (150mg). Analyze DNA yield and purity by agarose gel and Nanodrop. Test results show Magen kit gets higher DNA yield and DNA purity than Qiagen kit.

Test result for Yeast DNA Extraction by MaPure Stool DNA Kit (D6364)



Take 1ml yeast culture and centrifuge. Use Magen Stool DNA Kit (D6364) extracting DNA. Mix with Buffer ATL/PCI and stay at 65°C for 15 min. Separate in two group, group 1 follow protocol directly (no glass beads). Group 2 add 500mg glass beads for grinding, vortex for 5 min, and then sample process with group one. Test results show that glass beads are key factor for DNA extraction from fungal samples successfully.

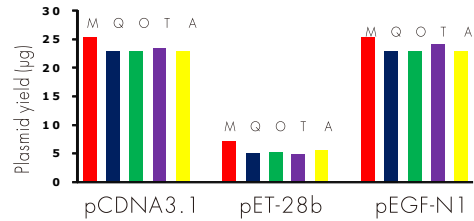
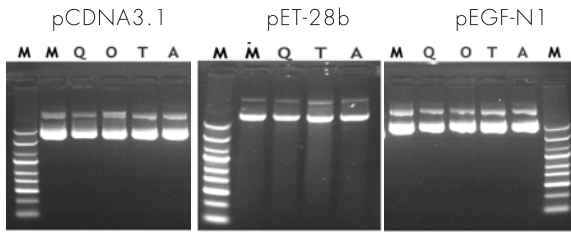
Plasmid DNA extraction are basic experiments in molecular biology area. And is also basic skills for every scientific researcher. With rich experience in this area, Magen R&D department has developed a series of plasmid DNA extraction products for 1-1000ml plasmid, non-endotoxin, and automatic purification platform. Magen provide products with silica spin column extraction technology and magnetic beads automatic extraction technology. Customers can choose the right product according their needs.

Product Guide

	Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products	
Column	HiPure Plasmid Mini Kit	P100102	100		● Isolation up to 35µg plasmid DNA from 1-5ml bacterial culture	Qiagen27104	
		P100103	250				
	HiPure Plasmid Mini Kit II	P100202	50		● Isolation up to 70µg plasmid DNA from 5-15ml bacterial culture		
		P100203	250				
	HiPure Plasmid Plus 96 Kit	P100601	1x96		● Isolation up to 20µg plasmid DNA from 1.5ml bacterial culture using 96 well bind plate and 96 filter plate	Qiagen16181	
		P100602	4x96				
		P100603	20x96				
	HiPure Fastfilter Plasmid Midi Kit	P101302	25		● Isolation up to 250µg plasmid DNA from 30-50ml bacterial culture		
		P101303	100				
	HiPure Fastfilter Plasmid Maxi Kit	P101402	10		● Isolation up to 1mg plasmid DNA from 200ml bacterial culture		
		P101403	50				
	Column	HiPure Plasmid EF Mega Kit	P111602	10		● Isolation up to 10mg endotoxin-free plasmid DNA from 500ml bacterial culture	Qiagen1054578
			P111603	50			
		HiPure Plasmid EF Mini Kit	P115402	50		● Isolation up to 70µg endotoxin-free plasmid DNA from 10-15ml bacterial culture	
			P115403	250			
HiPure Plasmid EF Maxi Kit		P115602	10		● Isolation up to 1.5mg endotoxin-free plasmid DNA from 200ml bacterial culture		
		P115603	50				
HiPure Plasmid EF 96 Kit		P115701	1x96		● Isolation up to 20µg endotoxin-free plasmid DNA from 1-5ml bacterial culture using 96-well bind plate		
		P115702	4x96				
P115703	20x96						
HiPure Plasmid EF Midi Kit(Vacuum)	P123102	50		● Isolation up to 500µg endotoxin-free plasmid DNA from 25-50ml bacterial culture	Qiagen12843		
HiPure Plasmid EF Midi Kit(Spin)	P123102B	50					
Magnetic beads	MagPure Plasmid Mini Kit	P181102	100		● Isolation up to 10µg plasmid DNA from 1.5ml bacterial culture		
		P181103	500				
		P181104	5000				
	MagPure Plasmid EF Mini Kit	P181402	100		● Isolation up to 20µg endotoxin free plasmid DNA from 1.5-5ml bacterial culture		
		P181403	500				
		P181404	5000				

HiPure Plasmid Mini Kit (1-5ml) Extraction high purity DNA from 1~5ml culture (P1001)

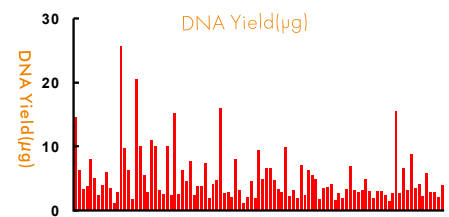
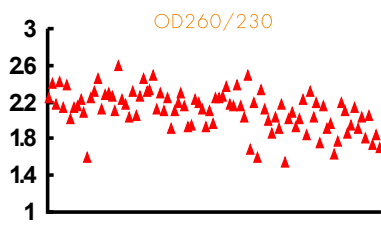
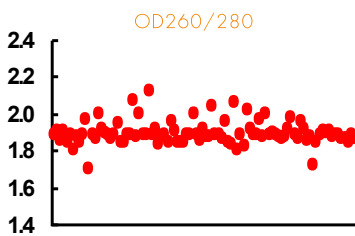
HiPure Plasmid Kits use classical alkaline lysis and silica spin column purification technology, extract high purity plasmid DNA from overnight culture such as E coli (Dh5 α , Jm109). Users can complete multiple samples extraction in 30~60 min. Purified plasmid DNA can be directly used for downstream like sequencing, restriction enzyme digestion, PCR, Blotting, etc.



Use different companies plasmid DNA mini kit extracting 3 different plasmid cultures (3ml). Analyze plasmid DNA (1 µl) on 1% agarose gel and Nanodrop. Test results show the four kits get similar DNA yield, Magen in a little higher.
M: Magen, Q: Qiagen, T: Tiangen, O: Omega, A: Axygen.

MagPure Plasmid Mini Kit (P1811) - High throughput Plasmid DNA extraction by magnetic beads

MagPure Plasmid Mini Kits uses magnetic bead purification technology, extract high purity plasmid DNA, BAC, Cosmid, ect from bacterial culture. Purified plasmid DNA can be used directly for automatic sequencing, chip analysis and other applications. This kit can be directly used with different companies pipetting station or nucleic acid extraction instrument, complete 20~50 pieces of 96 well plate per day. In addition, we also provide manual protocol, 1 person can finish up to 10~30 pieces of 96 well plate in one day, greatly save time and cost.



Use MagPure Plasmid Mini Kit (P1811) extracting DNA from 96 different plasmid samples. And analyze DNA by Nanodrop 2000. A sequencing company (our customer) provide us a feedback that our kit reach 99% success in 200,000 plasmid samples extraction. Stable quality with different batches kits.



HiPure Plasmid Mini Kit (P1001)



HiPure Plasmid EF Maxi Kit (P1156)

DNA/RNA Clean-up are basic experiments in molecular biology area. And is also basic skills for every scientific researcher. With rich experience in this area, Magen R&D department has developed a series of nucleic acid clean up products. Magen provide products with silica spin column extraction technology and magnetic beads automatic extraction technology. Customers can choose the right product according their needs.

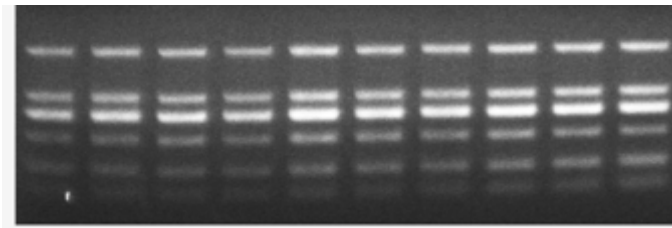
Product Guide

	Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Column	HiPure Gel DNA Micro Kit	D211002	100		● DNA clean up from agarose gel with low volume elute (10ul)	
		D211003	250			
	HiPure Gel DNA Mini Kit	D211102	100		● DNA Clean Up from agarose gel	Qiagen28704
		D211103	250			
	HiPure PCR Pure Micro Kit	D212002	100		● DNA Clean Up from PCR, Enzyem reactions	Qiagen28104
		D212003	250			
	HiPure PCR Pure Mini Kit	D212102	100		● DNA Clean Up from PCR, Enzyem reactions	
		D212103	250			
	HiPure Clean Up 96 Kit	D212201	1x96			
		D212202	4x96		● DNA Clean Up from agarose gel&reactions using 96 bind plate	
	HiPure DNA Clean Up Kit	D212203	20x96			
		D214102	100		● DNA Clean Up from PCR, Enzyem reactions, rude gDNA products	
	HiPure RNA Clean Up Kit	D214103	250			
		D214402	50		● RNA Clean Up from Enzyme reactions, rude RNA Products	
		D214403	250		Qiagen74204	
Magnetic beads	MagPure Gel Pure DNA Kit	D500101	50			
		D500102	500		● DNA Clean Up from agarose gel using magnetic particles	
		D500103	5000			
	MagPure DNA/RNA CleanUp Kit	D500301	50			
		D500302	500		● DNA/RNA Clean Up from PCR, enzyme reactions using magnetic particles	
		D500303	5000			
	CleanSeq Beads	BCS-5	5ml			
		BCS-50	50ml		● Bigdye terminator removal using magnetic beads	BeckmanA29154
		BCS-500	500ml			
	MagPure A4 XP	BP-5	5ml			
		BP-50	50ml		● DNA Clean Up from PCR&enzyme reactions using size selection Speed beads	BeckmanA63881
		BP-500	500ml			
	MagPure A3	BXP-5	5ml			
		BXP-50	50ml		● DNA Clean Up from PCR&enzyme reactions using size selection beads	
		BXP-500	500ml			
	MagSelect Beads	XP-5	5ml			
		XP-50	50ml		● DNA Clean Up from enzyme reactions using size selection beads	
		XP-500	500ml			BeckmanB23317
RNA Clean Beads	BRP-5	5ml				
	BRP-50	50ml		● RNA Clean Up from enzyme reactions using beads		
		BRP-500	500ml		BeckmanA63987	

MagPure DNA Clean Up Kit (D5001) - High recovery of DNA from gel and Buffer by magnetic beads

MagPure DNA Clean Up Kit is specially designed for bulk amount gel DNA purification. This kit uses superparamagnetic particle purification technology, Recover 100bp~20Kbp DNA fragments from 100~300mg agarose gel in high recovery yield (85%). Purified DNA can be directly used in sequencing, chip analysis and other applications.

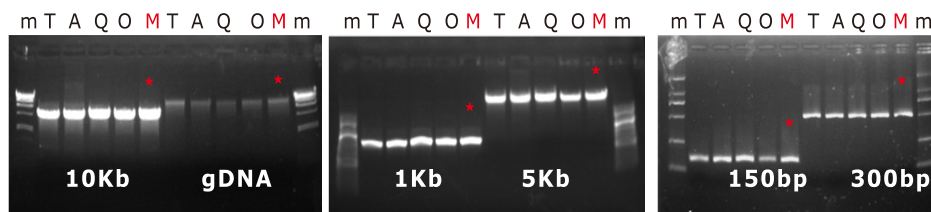
60%| 80%| Column | 100mg | 200mg | 300mg |



Take 5µl 100bp DNA Marker running on 1% agarose gel for 5 min. Cut 100mg/200mg /300mg agarose gel (including DNA marker) and extract DNA fragments by HiPure Gel Pure DNA Mini Kit and MagPure Gel Pure DNA LQ Kit. Results show same results on 100/200/300mg gel, all get over 80% recovery yield and column kit gets higher yield than magnetic bead kit. A sequencing company (our customer) provide us a feedback that our kit reach 99% success in 50,000 pcs agarose gel extraction. Stable quality with different batches kits

HiPure Gel DNA Mini Kit - High recovery of DNA from agarose gel (D2111)

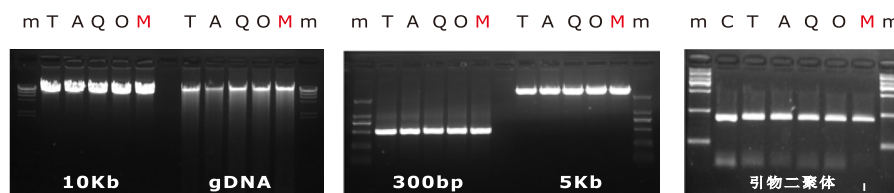
HiPure Gel DNA Mini Kits use silica spin column purification technology, extract high yield DNA fragments from different concentration agarose gel. Users can finish multiple DNA clean up in 15 min. Purified DNA can be directly used for downstream applications like sequencing, restriction enzyme digestion, PCR, Blotting, ect.



Different DNA fragments runned on 1% agarose gel electrophoresis. Then use different companies gel DNA extraction kits extracting DNA from agarose. M: Magen, Q: Qiagen, T: Tiangen, O: Omega, A: Axygen

HiPure PCR Pure Mini Kits - High recovery of DNA from PCR mixture (D2121)

HiPure PCR Pure Mini Kits use silica spin column purification technology, extract high yield DNA fragments from different size of PCR reaction mixtures. Fast extraction finish in 15 min. Add binding buffer into PCR mixture, mix and transfer to spin column for DNA binding, but primer dimer/primer/salts will not be adsorbed and remove by flowthrough. Wash the columns with two low salt solution to remove other impurities, Elute the column by nuclease-free water, and get the purified DNA at last.



PCR reaction mixtures with different fragments purified by 5 companies PCR purification kits, then analyze purified DNA by agarose gel. Test results show 5 companies kits get similar DNA yield for PCR mixture. But when extracting from PCR mixtures with primer dimers, Magen HiPure PCR Pure Kit gets better quality in removing primer dimers completely.

With the discovery of more and more miRNA families and their important role in gene regulation, the characteristics, mechanism and biological function of miRNA as well as RNAi technology have become Hotspot of biological research. And Small interfering RNA (SiRNA) plays an important role in the gene therapy of tumor. The standard RNA purification technology is mainly for big size RNA(>200nt), and miRNA, especially miRNA <25nt, usually lost or low recovery in RNA purification and cause failure in downstream applications. Experiment results show that removing influence of big size RNA, can significantly improve miRNA analysis results. Magen provides targeted products for miRNA extraction from various samples.



Product Guide

	Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Column	HiPure Universal miRNA Kit	R431002	50		● Isolation total RNA and miRNA from tissue, plant, cell using MagZol reagent and column	Qiagen217084
		R431003	250			
	HiPure Cell miRNA Kit	R431102	50		● Isolation total RNA and miRNA from cell and tissue without MagZol reagent	Qiagen217604
		R431103	250			
	HiPure Serum miRNA Kit	R431402	50		● Isolation total RNA and miRNA from 0.3-0.9ml serum and plasma	MN740981.50
		R431403	250			
	HiPure Liquid RNA (miRNA) Kit	R416302	50		● Isolation total RNA (include miRNA) from 0.25ml body fluids	Qiagen217184
		R416303	250			
Magnetic beads	MagPure Serum miRNA Kit	R662801	48		● Isolation miRNA from 0.3-0.5ml serum or plasma	
		R662802	96			
		R662803	5 x 96			

Advantages:

- High quality - one step RNA extraction reagent combined with silica gel column can obtain the highest concentration
- Fast Extraction - several samples can be extracted in 40 minutes
- High applicability - samples including animals, plants, bacteria, cells, etc.
- High concentration - efficiently remove macromolecular RNA, enrich small RNA and improve sensitivity

DNA and RNA purification technologies mainly include phenol-chloroform extraction, ion exchange, salting out, glass milk and silica gel column. However, these technologies often extract only one kind (DNA or RNA) and waste the samples. When sample is limited, we usually need to separate DNA and RNA from one sample. Extracting DNA, RNA and Protein separately from one sample technology was limited in the market. In 1993, Chomczynski improved the one-step RNA extraction method (Trizol Reagent), he extracted DNA, RNA and protein using only one solution. But the DNA purity was very low and extremely hard to dissolve (in 8mM NaOH solution), serious DNA fragmentation and can get only 10kb DNA. The DNA quality was difficult to meet downstream application requirements. Magen has developed extraction kits with spin column purification technology, can separate DNA, total RNA and protein from one sample rapidly and efficiently

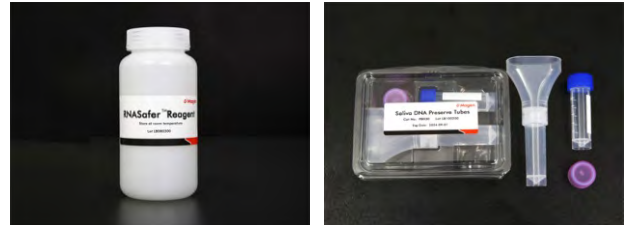


Product Guide

	Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Column	HiPure DNA/RNA Kit	R511102	50		● Co-isolation DNA and RNA from a single sample (cells, soft tissue, plant sample)	Qiagen80204
	HiPure Fibrous DNA/RNA Kit	R511402	50		● Co-isolation DNA and RNA from skin, muscle, connective tissue, fibrous tissue sample which is hard to lysed	
	HiPure DNA/RNA/Protein Kit	R521102	50		● Co-isolation DNA and RNA/ protein from a single sample (cells, soft tissue, plant sample)	Qiagen80004
	HiPure FFPE DNA/RNA Kit	IVD5116	50		● Co-isolation DNA and RNA from a single FFPE tissue sample	Qiagen80234
Magnetic beads	MagPure FFPE DNA/RNA Kit	IVD3026	200		● Co-isolation total RNA and DNA from FFPE tissue. Separate DNA/RNA during lysis then extract by magnetic beads. Higher RNA integrity	
	MagPure FFPE DNA/RNA Kit	R632701	48		● Co-isolation total RNA and DNA from FFPE tissue. Separate DNA/RNA by magnetic bead adsorption mechanism after lysis. Higher DNA/RNA Yield.	
	MagPure FFPE DNA/RNA Kit	R632702	96			
		R632703	5 x 96			

Tissue RNA Preserve Tube contains a safe tissue RNA protective agent. It can rapidly cleave salivary cells, inactivate nuclease and protect RNA from degradation. Biological samples (tissues and cells) can be stored at room temperature (15~25°C) for 1 week, 2~8°C for 1 months, or -20°C/-80°C for over 6 months by simply soaking in the reagent. Tissue RNA Preserve Tube is suitable for preserving various fresh biological samples, such as animal tissue, plant tissue, cultured cells, etc.

RNA Safer Reagent is a safe tissue RNA protective agent. It can quickly penetrate into the cell, inactivate nuclease and protect RNA from degradation. Biological samples (tissues and cells) can be stored at room temperature (15~25°C) for 1 week, 2~8°C for 1 months, or -20°C/-80°C for over 6 months. RNA Safer Reagent is suitable for preserving various fresh biological samples, such as animal tissues, plant tissues, cultured cells, etc. Samples protected by RNA Safer Reagent can be more convenient for transportation and storage.



Product Guide

	Product Name	Cat #	Quantity	Price (\$)	Feature
Preserve Tube	Tissue RNA Preserve Tubes (2ml)	P8010	100		● Preserve Tissue RNA, DNA, Protein at 15-25°C for 6 days, 2-8°C for 30 days, Long term at -20-80°C
	Tissue RNA Preserve Tubes (5ml)	P8011	100		
	Tissue DNA Preserve Tubes (2ml)	P8020	100		● Preserve Tissue DNA at 15-25°C for 90 days, 2-8°C for 180 days, Long term at -20°C
	Tissue DNA Preserve Tubes (5ml)	P8021	100		
	Saliva DNA Preserve Tubes (5ml)	P8030	10		● Preserve 2ml Saliva DNA at 15-25°C for 1 year
	Saliva DNA Preserve Tubes (5ml)	P8031	100		
	Swab DNA Preserve Tubes (1.5ml)	P8040	20		● Preserve Swab DNA at 15-25°C for 1 year
	Swab DNA Preserve Tubes (1.5ml)	P8041	100		
	Stool DNA Preserve Tubes (5ml)	P8050	20		● Preserve Stool DNA at 15-25°C for 14 days, Long term at -20°C
	Stool DNA Preserve Tubes (5ml)	P8051	100		
Preserve Reagent	Blood RNA Preserve Tubes (10ml)	P8060	10		● Preserve 3ml Blood RNA at 2-8°C for 3 days, Long term at -20°C
	Blood RNA Preserve Tubes (10ml)	P8061	100		
	RNA Safer Reagent	P8310	500ml		● RNA preservation reagent
	Saliva DNA Reagent	P8320	500ml		● Saliva DNA preservation reagent
	Stool DNA Reagent	P8330	500ml		● Stool DNA preservation reagent
	RNA Safer LS Reagent	P8340	500ml		● Liquid samples (blood, saliva, cell culture medium) RNA preservation reagent

Product Guide

Product Name	Cat #	Size	Feature
Small Volume Extractor			
MagMix 32 Nucleic acid Extractor	MagMix32	32 channels	<ul style="list-style-type: none"> Small nucleic acid extractor, 2 plates, 96 well plate, 8 magnetic sleeves, processing 1-32 samples
MagMix 48 Nucleic acid Extractor	MagMix48	48 channels	<ul style="list-style-type: none"> Medium throughput nucleic acid extractor, 3 plates, 96 well plate, 8 magnetic sleeves, processing 1-48 samples
MagMix 96 Nucleic acid Extractor	MagMix96	96 channels	<ul style="list-style-type: none"> High throughput nucleic acid extractor, 6 plates, 96 well plate, 96 magnetic sleeves, processing 1-96 samples
			
Medium Volume Extractor			
MagMix 32B Nucleic acid Extractor	MagMix32B	32 channels	<ul style="list-style-type: none"> Medium volume nucleic acid extractor, anti-pollution, high sensitivity, 4 plates, 48 well plate, 8 magnetic sleeves, processing 1-32 samples
MagMix 48B Nucleic acid Extractor	MagMix48B	48 channels	<ul style="list-style-type: none"> Medium volume nucleic acid extractor, anti-pollution, high sensitivity, 6 plates, 48 well plate, 48 magnetic sleeves, processing 1-48 samples
MagRotex 32 Nucleic acid Extractor	MagRotex32	32 channels	<ul style="list-style-type: none"> Simple nucleic acid extractor, medium volume, scientific research type, reagent strip, elution tube, processing 1-32 samples (sample volume 0.2-4ml)
MagRotex 8 Nucleic acid Extractor	MagRotex8	8 channels	<ul style="list-style-type: none"> Simple nucleic acid extractor, medium volume, scientific research type, reagent strip, elution tube, processing 1-8 samples (sample volume 0.2-4ml)
		Large Volume Extractor	
MagMix 12 Nucleic acid Extractor	MagMix12	12 channels	<ul style="list-style-type: none"> Large volume nucleic acid extractor, cell free DNA, 24 well plate, 3 plates, 4 tests / plate, maximum treatment of 2ml sample
MagMix 16 Nucleic acid Extractor	MagMix16	48 channels	<ul style="list-style-type: none"> Large volume nucleic acid extractor, cell free DNA, 56 well plate, 2 plates, 8 tests / plate, maximum treatment of 5ml sample
MagMix 24 Nucleic acid Extractor	MagMix24	24 channels	<ul style="list-style-type: none"> Large volume nucleic acid extractor, cell free DNA, 24 well plate, 6 plates, 24 magnetic sleeves, maximum treatment of 2ml sample
MagRotex 24 Plus LV Nucleic acid Extractor	MagRotex24 Plus	24 channels	<ul style="list-style-type: none"> Large volume nucleic acid extractor, cell free DNA, rotate to prevent pollution, reagent strip, 24 channels, isolate free DNA from 2-9ml plasma/serum
MagRotex 24 LV Nucleic acid Extractor	MagRotex24	24 channels	<ul style="list-style-type: none"> Large volume nucleic acid extractor, cell free DNA, rotate to prevent pollution, reagent strip, 24 channels, isolate free DNA from 2-4ml plasma/serum

MagMix Extractor

MagMix Automatic Nucleic Acid Extraction System is the equipment for DNA/RNA extraction from biological samples. The system operates automatically by moving magnetic rods and disposable tips, to complete the process of sample lysis, nucleic acid adsorption, wash and elution. It can process 1-96 samples at one time, meeting different sample amount requirement. It can be used with single reagent tube consumable to prevent the waste of consumables.

The system is compatible with different reagents for DNA/RNA extraction from animal, plant, food, pathogen, and clinical samples. It is applicable for use in multiple fields, for example, clinical test, scientific research, genomic analysis, centers for disease control, food safety and forensic identification.



Purchase Guide

Cat. No.	Consumables	Extraction mode	Plate/Strip amount	Hole/Plate position	Sample amount	Sample volume	Process Volume
MagMix 32	96 well plate	Single plate, 16 samples/plate	2 plates	6 hole position	32	<1ml	1ml
MagMix 48	96 well plate	Single plate, 16 samples/plate	3 plates	6 hole position	48	<500µl	1ml
MagMix 96	96 well plate	Multiple plates, 96 samples/plate	6 plates	6 plate position	96	<500µl	1ml
MagRotex 8	Reagent strip	Reagent strip	8 strips	7 hole position	8	0.2-1ml	4ml
MagRotex 32	Reagent strip	Reagent strip	32 strips	7 hole position	32	0.2-4ml	4ml
MagMix 32B	48 well plate	Single plate, 8 samples/plate	4 plates	6 hole position	32	<750µl	1.5ml
MagMix 48B	48 well plate	Multiple plates, 48 samples/plate	6 plates	6 plate position	48	<750µl	1.5ml
MagMix 12	24 well plate	Single plate, 4 samples/plate	3 plates	6 hole position	12	<2ml	5ml
MagMix 16	56 well plate	Single plate, 8 samples/plate	2 plates	7 hole position	16	<5ml	10ml
MagMix 24	24 well plate	Multiple plates, 24 samples/plate	6 plates	6 plate position	24	<2ml	5ml
MagRotex 24	Reagent strip	Reagent strip	24 strips	6 hole position	24	2ml-4ml	7ml
MagRotex 24 Plus	Reagent strip	Reagent strip	24 strips	9 hole position	24	2ml-9ml	10ml

MagMix Automated Extractor

Full automation is throughout the process of nucleic acid extraction, and 96 samples can be processed at one time. Efficiency is 4-5 times of the manual methods.

The optimization for the magnetic rods and mix technology is developed for all micro-size magnetic beads, extracting nucleic acids efficiently without loss.

System can edit and store multiple programs, and has a large storage kernel, to ensure the consistency of each run.

Replaceable deep well head and heating block (24/48/96). Wide range sample size for different application.

Fully contact between the deep well plates and heating modules, leads to a precise and stable temperature within each well, resulting in a high efficiency of sample lysis and nucleic acid elution.

Disposable tips and built-in UV radiation lower the safety risk of operation, and avoid the aerosol contamination between each run.

High Throughput

High Performance

Standard Operation

Flexible

Precise temp

Safty



Magen Prepack Kit for MagMix 32/48 Extractor



Magen Prepack Kit for MagMix 96 Extractor

MagMix Automated Extactor

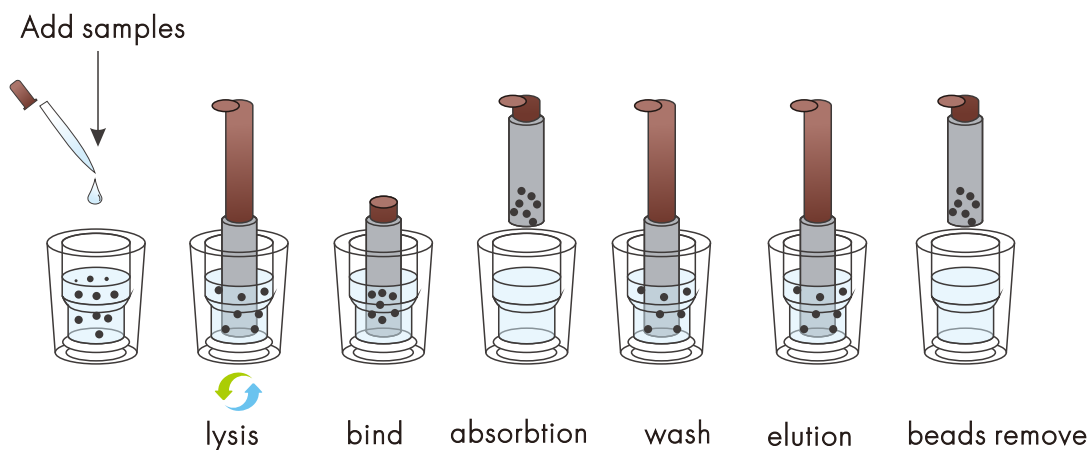
MagMix Automatic Nucleic Acid Extraction System is the equipment for DNA/RNA extraction from biological samples. The system operates automatically by moving magnetic rods and disposable tips, to complete the process of sample lysis, nucleic acid adsorption, wash and elution. It can treat 96 samples easily and efficiently at one time. By using match reagents, it is applicable for samples from different origin (animal, plant, and clinical samples, etc.).

Automatic Nucleic Acid Extraction System uses customized 96-well deep well plates, which match closely with heating adaptor for a stable and consistent temperature between wells, leading to a stable result. The system is compatible with different reagents for DNA/RNA extraction from animal, plant, food, pathogen, and clinical samples. It is applicable for use in multiple fields, for example, clinical test, scientific research, genomic analysis, centers for disease control, food safety and forensic identification.

Principle

The system operates by controlling the magnetic rods to transfer the magnetic beads, and disposable tips to mix the solutions. Samples are lysed, and then the nucleic acids are adsorbed to magnetic beads, then washed and eluted to produce the high-quality nucleic acids.

The magnetic bead method has the advantage of high automation, efficient extraction, stable results and easy operation. 96 samples can be processed by using 96-well deep well plate.



Applications

MagMix Automatic Nucleic Acid System is applicable to the samples of serum, plasma, throat swab, anal swab, feces, genital secretion, exfoliated cells, urine, sputum, etc. And it can be used in clinical laboratory of gene detection, Centers for Disease Control, research institute, medical colleges, etc.

The series of nucleic acid columns produced by Magen Biotech are based on carefully selected imported silica membranes (GF/B, GF/D, GF/F). Columns production processes such as polypropylene injection molding materials, injection molding process, and downstream membrane packing and compression rings are strictly controlled. This is to ensure that the column has extremely high adsorption capacity and long-term stability. Compared with conventional products on the market, Magen's columns are with varieties, and binding rate will not change when stored at room temperature for 4 years.

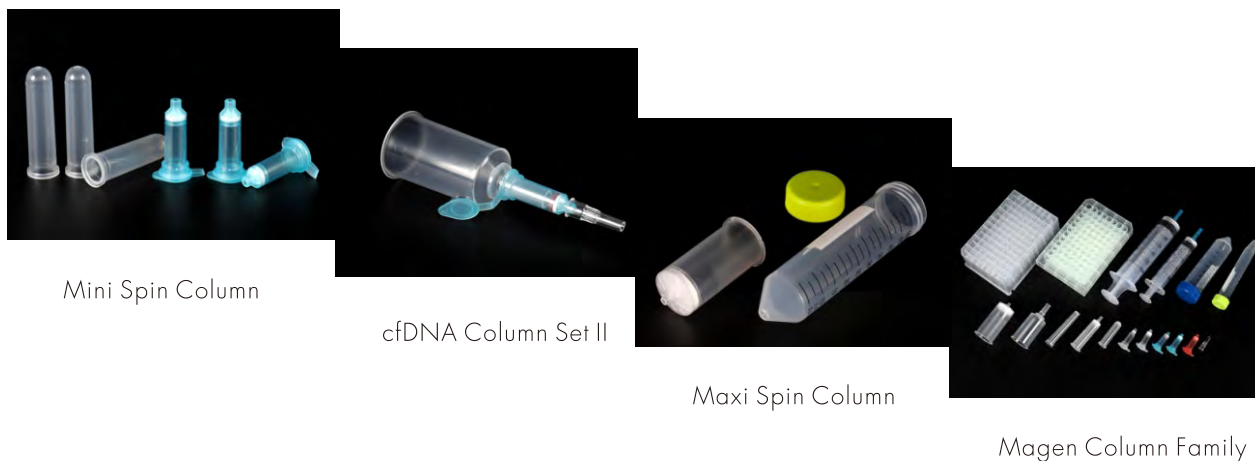
Product Guide

Product Name	Cat #	Size	Price (\$)	Feature
HiPure DNA Nano Column	C13010	1000/Bag		<ul style="list-style-type: none"> Column for trace amount DNA isolation
HiPure DNA Micro Column	C13011	1000/Bag		<ul style="list-style-type: none"> Column for micro amount DNA isolation
HiPure DNA Mini Column I	C13100	1000/Bag		<ul style="list-style-type: none"> Column for universal DNA isolation, gel/PCR extraction
HiPure DNA Mini Column II	C13110	1000/Bag		<ul style="list-style-type: none"> Column for universal DNA isolation, plasmid DNA extraction,
HiPure RNA Mini Column	C13111	1000/Bag		<ul style="list-style-type: none"> Column for total RNA isolation, universal RNA column, no sample clogging column design
HiPure Viral Mini Column	C13112	1000/Bag		<ul style="list-style-type: none"> Column for viral/pathogen nucleic acid isolation
HiPure cfDNA Mini Column	C13113	1000/Bag		<ul style="list-style-type: none"> Column for cell-free DNA isolation
HiPure DNA Midi Column	C13120	100/Bag		<ul style="list-style-type: none"> Column for medium amount nucleic acid isolation
HiPure DNA Midi Column III	C13121	100/Bag		<ul style="list-style-type: none"> Column for medium amount nucleic acid isolation
HiPure gDNA Maxi Column	C13122	100/Bag		<ul style="list-style-type: none"> Column for maxi amount genomic DNA isolation, no sample clogging column design
HiPure DNA Maxi Column III	C13123	100/Bag		<ul style="list-style-type: none"> Column for maxi amount DNA isolation, V bottom 50ml collection tube
HiPure DNA Maxi Column C	C13124	100/Bag		<ul style="list-style-type: none"> Column for maxi amount DNA isolation, U bottom 50ml collection tube
HiPure DNA Plate	C13130	10/Bag		<ul style="list-style-type: none"> 96 well DNA Column plate with 1.6ml Collection plate
HiPure gDNA Plate	C13131	10/Bag		<ul style="list-style-type: none"> 96 well DNA Column plate with 1.6ml Collection plate, for genomic DNA isolation
HiPure CFDNA Column Set I (Centrifuge method)	C13114	100/Pack		<ul style="list-style-type: none"> cfDNA Column Set with 50ml centrifuge tube, extender tube, cfDNA mini column, collection tube, collection tube III
HiPure CFDNA Column Set II (Vacuum method)	C13115	100/Pack		<ul style="list-style-type: none"> cfDNA Column Set with extender tube, cfDNA mini column, vac connector, collection tube
Extender Tubes	C13302	50/Bag		<ul style="list-style-type: none"> Extender tube/Column funnel to prepare with large sample size

Purchase Guide

Item No.	Column types	Membrane type/number of layers	Collection tubes	Liquid volume capacity	Plasmid DNA binding capacity (Physical adsorption)	gDNA/RNA binding capacity (Alcohol-mediated adsorption)	Minimum Elution volume
C13010	HiPure DNA Nano Column	2 layers GF/F	2ml without cap	700µl	5µg	20µg	10µl
C13011	HiPure DNA Micro Column	3 layers GF/F	2ml without cap	700µl	10µg	50µg	15µl
C13100	HiPure DNA Mini Column I	2 layers GF/B	2ml without cap	700µl	15µg	100µg	30µl
C13110	HiPure DNA Mini Column II	4 layers GF/B	2ml without cap	800µl	35µg	200µg	50µl
C13111	HiPure RNA Mini Column	3 layers GF/B	2ml without cap	800µl	30µg	200µg	30µl
C13112	HiPure Viral Mini Column	3 layers GF/F	2ml without cap	800µl	30µg	200µg	30µl
C13113	HiPure CFDNA Mini Column	3 layers GF/F 1 layer GF/B	2ml without cap	800µl	30µg	200µg	30µl
C13120	HiPure DNA Midi Column	4 layers GF/B	15ml Centrifuge tube	4ml	125µg	1mg	500µl
C13121	HiPure DNA Midi Column III	8 layers GF/B	15ml Centrifuge tube	4ml	250µg	1mg	500µl
C13122	HiPure DNA Maxi Column	4 layers GF/B	50ml Centrifuge tube	20ml	500µg	5mg	1000µl
C13123	HiPure DNA Maxi Column III	8 layers GF/B	50ml Centrifuge tube	20ml	1mg	5mg	1000µl
C13124	HiPure DNA Maxi Column C	8 layers GF/B	50ml high speed Centrifuge tube	12ml	1mg	5mg	700µl
C13130	HiPure DNA Plate	2 layers GF/F	1.6ml Plate	900µl	30µg	100µg	80µl
C13131	HiPure gDNA Plate	2 layers GF/B	1.6ml Plate	900µl	30µg	100µg	80µl

Note: GF/B pore size is for 1.0µm glass fiber membrane; GF/F pore size is for 0.7µm glass fiber membrane.



Mini Spin Column

cfDNA Column Set II

Maxi Spin Column

Magen Column Family

Magnetic bead nucleic acid purification technology uses nano or micron superparamagnetic material as the matrix, generally black ferric oxide or yellowish brown ferric oxide as the magnetic material. The surface of bead is coated with appropriate functional groups, which can adsorb nucleic acid. Magnetic beads commonly used for nucleic acids, containing carboxyl groups, hydroxyl groups, or silicon groups. Silicon-based magnetic beads are the most common, and its principle of adsorbing nucleic acid is consistent with the classical glass milk purification technology or glass fiber filter membrane purification method. Magpure particle is a kind of polydisperse fast speed silica magnetic beads. The core is ferric oxide, accounting for 50%, and the surface coating is silica, accounting for 50%. The product can be used for plasmid extraction, gel DNA recovery, product purification, genomic DNA and RNA extraction, and viral nucleic acid extraction.

Product Guide

Product Name	Cat #	Size	Price (\$)	Feature
DNA/RNA binding beads				
MagPure Particles	C14100	100 ml		● Magnetic beads for gDNA/RNA, viral DNA/RNA isolation, 1.5-5µm size silica beads
	C14101	400 ml		
	C14102	3x400 ml		
	C14103	10x400 ml		
MagPure Particles N	C14110	100 ml		● Magnetic beads for viral DNA/RNA extraction, plasmid, DNA/RNA Clean Up, 0.2~2µm silica beads
	C14111	400 ml		
	C14112	3x400 ml		
	C14113	10x400 ml		
MagPure Particles G	C14120	100 ml		● Magnetic beads for circulating/FFPE DNA/RNA isolation, 1~1.5µm size silica beads
	C14121	400 ml		
	C14122	3x400 ml		
	C14123	10x400 ml		
MagBind Particles	C14130	10 ml		● Magnetic beads for low copy DNA/RNA isolation, immunoassays, 1µm size carboxyl beads
	C14131	100 ml		
MagPure Particles F	C14140	100 ml		● Magnetic beads for large volume cell-free DNA/RNA isolation, 0.2-1.5µm size silica beads
	C14141	400 ml		
	C14142	3x400 ml		
	C14143	10x400 ml		
NGS Clean up Beads				
(See DNA/RNA Clean up on Page 25)				

Purchase Guide

Features	MagPure Particles	MagPure Particles N	MagPure Particles G	MagPure Particles F	MagBind Particles
Cat.No.	C1410	C1411	C1412	C1414	C1413
Concentration	100mg/ml	70mg/ml	40mg/ml	50mg/ml	10mg/ml
Form	Amorphous and Porous	Amorphous and Porous	Porous	Amorphous	Nonporous
Surface function	Si-OH, Silica Beads	Si-OH, Silica Beads	Si-OH, Silica Beads	Si-OH, Silica Beads	COOH, Carbo Beads
Dispersion	Polydisperse	Polydisperse	Monodisperse	Monodisperse	Monodisperse
Particle Size	1.5~5 μ m	0.2~2 μ m	1~1.5 μ m	0.2-1.5 μ m	0.8-1 μ m
Color	Black	Yellowish Brown	Dark Brown	Dark Brown	Yellowish Brow
Magnetic response	15-30s	~60s	~30s	20s	120s
Settling Time (1ml)	>5min	>10min	>3 min	>3 min	>2 h
Usage (0.2ml Sample)	20ul	20ul	20~30ul	20~30ul	20~30ul
DNA Recover Rate(only 4M GITC)	>80%	>80%	>80%	>80%	0
DNA Recover Rate(10% PEG8000/NaCl)	>85%	>85%	>85%	>85%	>90%
Recommended Use	<ul style="list-style-type: none"> gDNA/RNA Isolation from Blood, Tissue, Plant, Swab, Spots, Stool, Soil and etc Viral DNA/RNA Isolation Agarose Gel DNA Purification 	<ul style="list-style-type: none"> DNA/RNA Isolation from low nucleic acid content samples Plasmid Isolation DNA/RNA Clean Up 	<ul style="list-style-type: none"> Circulating DNA Isolation Viral Nucleic acid Isolation gDNA Isolation FFPE DNA/RNA Isolation 	<ul style="list-style-type: none"> Plasmid extraction gel DNA recovery genomic DNA extraction RNA extraction viral nucleic acid extraction Circulating DNA 	<ul style="list-style-type: none"> DNA/RNA Clean Up and concentration DNA/RNA Isolation from low nucleic acid content samples Research immunoassays

The MagPure magnetic-particle technology combines the speed and efficiency of silica-based DNA purification with the convenient handling of magnetic particles. DNA binds to the silica surface of the magnetic particles in the presence of a chaotropic salt. DNA bound to the particles is then efficiently washed, considerably improving the purity of DNA. High-quality DNA is eluted. The automated purification procedure completely removes enzymes, nucleotides, and other contaminants and inhibitors. Purified DNA is suitable for direct use in downstream applications, such as sequencing and microarray analysis.



Magen provides high purity chemicals for nucleic acid extraction use or reagents production. With rich experience, strict internal QC control and high quality material source, Magen company is ideal to help life science companies to get reliable materials to make high quality production. We can also offer whole solutions for OEM production and help customer to build production line. All chemicals are stable at room temperature and keep high batch consistency. We are able to provide on small or bulk package.

Product Guide

Product Name	Cat #	Size	Price (\$)	Feature
Guanidine hydrochloride	C11101	5KG		● Molecular Biology Grade, CAS: 50-01-1
	C11102	25KG		
Guanidinium thiocyanate	C11103	5KG		● Molecular Biology Grade, CAS: 593-84-0
	C11104	25KG		
Brij-58	C11201	1KG		● Polyoxyethylene ether, CAS: 9004-95-9
	C11202	10KG		
SDS	C11203	1KG		● Sodium dodecyl sulfate, CAS: 151-21-3
	C11204	5KG		
CTAB	C11205	1KG		● Cetyltrimethylammonium bromide, CAS: 57-09-0
	C11206	5KG		
SLS	C11207	1KG		● Sarcosyl, CAS: 137-16-6
	C11208	5KG		
Triton X-100	C11209	4000ml		● Octylphenoxypolyethoxyethanol, CAS: 9002-93-1
Tween-20	C11210	4000ml		● Polyethylene glycol sorbitan monolaurate, CAS: 9005-64-5
EDTA-Na2	C11220	1KG		● Disodium edetate, CAS: 139-33-3
	C11221	25KG		
Tris base	C11222	1KG		● Molecular Biology Grade, CAS: 77-86-1
	C11223	5KG		
Tris HCL	C11224	1KG		● Molecular Biology Grade, CAS: 1185-53-1
	C11225	5KG		
DTT	C12140	1g		● Dithiothreitol, CAS: 3483-12-3
	C12141	10g		
	C12142	100g		
PVP-40	C198	100g		● Molecular Biology Grade, CAS: 1185-53-1
	C199	1000g		

Proteinase K is a stable serine protease with broad substrate specificity. It degrades many proteins in the native state even in the presence of detergents. It is widely used in molecular biology applications to digest unwanted proteins, such as nucleases in DNA or RNA preparations from microorganisms, cultured cells, and plants.

Rnase A is an endoribonuclease that specifically degrades single-stranded RNA at C and U residues. It is the removal of RNA from preparations of plasmid DNA. The enzyme is active under a wide range of reaction conditions. At low salt concentrations (0 to 100 mM NaCl), RNase A cleaves single-stranded and double-stranded RNA as well as the RNA strand in RNA-DNA hybrids.

Product Guide

Product Name	Cat #	Size	Price (\$)	Feature
Proteinase K (Lyophilizate, Ultra Pure)	C12100	1g		
	C12101	10g		● Ultra-pure recombinant protease K lyophilized, >30units/30mg protein
	C12102	100g		
Proteinase K Solution	C12103			● Ready to use normal temperature liquid protease K
	C12104			
Poly A	C12110	310 µg		
	C12111	1g		● Carrier RNA, Poly A, nucleic acid assistant
	C12112	310 µg-1 mg		
Rnase A	C12120	1g		● Bovine pancreatic ribonuclease A (lyophilized powder)
	C12121	10g		
RNase Solution	C12123	10ml		
	C12124	100ml		● Liquid ribonuclease A
DNase Free RNase Solution	C12128	10ml		
	C12129	100ml		
Dnase I	C12131	100mg		● High purity bovine pancreatic deoxyribonuclease I (3000 units/mg), with solution and DNase buffer
	C12132	1g		
DNase Set	C12133	500 Preps		● RNase free DNase I kit with digestion buffer
	C12134	10 x 500 Preps		
Lysozyme	C12135	10g		● CAS: 12650-88-3, >50Kunitz units/mg protein
2ml Beads Tubes	C14501	100/PK		● Glass bead tubes for soil, stool, tissue lysis
2ml Bacterial Tubes	C14502	100/PK		● Glass bead tubes for bacterial lysis

All products work high performance on nucleic acid isolation. Small and bulk OEM package are both available.

cfDNA detection is also widely used in noninvasive prenatal testing (NIPT). The method for detecting cfDNA by NIPT is mainly developed based on next-generation sequencing technology (NGS), including random high-throughput parallel sequencing, target or chromosome specific sequencing and single nucleotide polymorphism sequencing. Fetal cfDNA in maternal plasma accounts for more than 10% of the total cfDNA in maternal plasma. Detecting these fetal cfDNA can determine the fetal RhD blood group, gender, chromosomal aneuploidy disease, single gene genetic disease and other related information. In addition, this method of detecting maternal plasma fetal cfDNA is less traumatic than invasive methods such as amniocentesis or villus biopsy, which greatly reduces the risk of complications such as intrauterine infection and abortion.

Recommended Products

Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Cell Free DNA/RNA Kit					
HiPure Circulating Nucleic Acid Micro Kit	D318002	50		● Isolation circulating DNA from 0.6ml plasma/serum/body fluids	
	D318003	250			
HiPure Circulating DNA Midi Kit C	D318202C	136		● Circulating DNA from 1~5ml plasma/serum/body fluids by Vacuum	
	D318203C	547			
MagPure Circulating DNA Mini Kit	IVD5432	200		● Circulating DNA from 0.2~1.2ml plasma/body fluids by Magnetic beds	
MagPure Circulating DNA Rich Mini Kit	1291750	50		● Remove DNA fragments >500bp, rich small fragment cfDNA from 0.2~0.6ml plasma/serum	
	12917200	200			
MagPure Circulating DNA Rich Maxi Kit	1292750	50		● Remove DNA fragments >500bp, rich small fragment cfDNA from 5ml plasma/serum	
	12927200	200			
Columns/Magnetic Beads					
MagPure Particles G	C14120	100 ml		● Magnetic beads for circulating/FFPE DNA/RNA isolation, 1~1.5um size silica beads	
	XP-5	5ml			
MagSelect Beads	XP-50	50ml		● DNA Clean Up from enzyme reactions using size selection beads	BeckmanB23317
	XP-500	500ml			
HiPure cfDNA Mini Column	C13113	100/Bag		● Column for cell-free DNA isolation	
HiPure CFDNA Column Set I (Centrifuge method)	C13114	100/Pack		● cfDNA Column Set with 50ml centrifuge tube, extender tube, cfDNA mini column, collection tube, collection tube III	
HiPure CFDNA Column Set II (Vacuum method)	C13115	100/Pack		● cfDNA Column Set with extender tube, cfDNA mini column, vac connector, collection tube	
Machine					
MagMix 32 Nucleic acid Extractor	MagMix32	32 channels		● Small nucleic acid extractor, 2 plates, 96 well plate, 8 magnetic sleeves, processing 1-32 samples	
MagMix 96 Nucleic acid Extractor	MagMix96	96 channels		● High throughput nucleic acid extractor, 6 plates, 96 well plate, 96 magnetic sleeves, processing 1-96 samples	

Key Products

D3182C HiPure Circulating DNA Midi Kit C (Vacuum Protocol)



Introduction

Free-circulating nucleic acids, such as tumor-specific extracellular DNA fragments and mRNAs in the blood or fetal nucleic acids in maternal blood, are present in serum or plasma usually as short fragments, <1000bp (DNA). HiPure Circulating DNA Midi Kit enables efficient purification of these circulating nucleic acids from human plasma, serum, or urine. The extracted products can be used for clinical in vitro detection.



Specification

Features	Specifications
Main Functions	Isolation circulating DNA from 1-5ml plasma, serum, body fluids using vacuum protocol
Applications	qPCR, liquid or solid chip analysis, hybridization and SNP detection, etc.
Purification method	Mini spin column
Purification technology	Silica technology
Process method	Manual (vacuum)
Sample type	Serum, plasma and other cell - free fluid samples
Sample amount	1-5ml
Elution volume	≥50μl
Time per run	≤60 minutes
Maxi volume of column	4ml
Binding yield of column	1mg



Advantages

- High yield - most optimal process, free DNA (>50bp) can be obtained to the maximum extent
- High concentration - low elution volume, ensuring high nucleic acid concentration
- High purity - low alcohol binding method, completely removing inhibitor and protein pollution
- High recovery - DNA can be recovered at the level of PG by silica gel column purification

Key Products

IVD5432 MagPure Circulating DNA Mini Kit



Introduction

The Kit is designed for purification of high quality circulating DNA (cfDNA) from cell-free body fluids (such as plasma, serum). The purified DNA is suitable for direct use in downstream applications such as PCR, real-time PCR, biochip analysis and NGS.



Specification

Features	Specifications
Main Functions	Isolation circulating DNA from 0.2- 0.6ml plasma, ser body fluids
Applications	qPCR, NGS, etc.
Purification method	Polydisperse magneticbeads
Purification technology	Magnetic beadstechnology
Process method	Manual or automatic
Adaptive instrument	Nucleic acid extractor and pipetting workstation
Sample type	Serum, plasma
Sample amount	0.2 - 0.6ml



Advantages

- Automatic – suitable for automatic extraction
- Economy – excellent performance and cost effectiveness



Principles

This product is based on the purification method of high binding magnetic particles. The sample is lysed and digested under the action of lysate and protease. DNA is released into the lysate. After adding magnetic particles and binding solution, DNA will be adsorbed on the surface of magnetic particles, and impurities such as proteins will be removed without adsorption. The adsorbed particles were washed with washing solution to remove proteins and impurities, washed with ethanol to remove salts, and finally DNA was eluted by elution buffer.

The circulating DNA released by circulating tumor cells in plasma or in situ tumor cells into circulation in tumor patients is also called ctDNA. The research directions of ctDNA in tumor diagnosis mainly include: detection of ctDNA mutation, tumor specific microsatellite changes, epigenetic changes, ctDNA integrity detection and virus DNA detection. CtDNA mutation detection can not only obtain the gene mutation results corresponding to tumor tissues, but also more sensitively and specifically detect typical characteristic mutations such as EGFR gene mutation of lung cancer, KRAS mutation of colorectal cancer and BRAF mutation of melanoma.

Recommended Products

Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Cell Free DNA/RNA Kit					
HiPure Circulating DNA Kit	IVD3182	50		● Circulating DNA from 1~5ml plasma/serum/body fluids by Vacuum	Qiagen 55114
MagPure Circulating DNA Maxi Kit	IVD5435	50		● Circulating DNA from 1~6ml plasma/serum/body fluids by Magnetic beads	Life A29319
MagPure Circulating DNA Maxi Kit	1292750	50		● Remove DNA fragments >500bp, rich small fragment cfDNA from 5ml plasma/serum	
	12927200	200			
FFPE DNA/RNA Kit					
HiPure FFPE DNA Kit	IVD3126	100		● Isolation total DNA from FFPE tissue samples	
MagPure FFPE DNA Kit	D632301B	48		● Isolation total DNA from FFPE using high bind beads	Omega M6958
	D632302B	96			
MagPure FFPE DNA Kit (High Pure)	D632301D	48		● Isolation high pure total DNA from FFPE using high bind beads	
	D632302D	96			
HiPure Microbiome DNA Kit	IVD5116	50		● Co-Isolation DNA and RNA from a single FFPE tissue sample	Qiagen80234
MagPure FFPE DNA/RNA Kit	IVD3026	200		● Co-Isolation total RNA and DNA from FFPE tissue	
Columns/Magnetic Beads					
MagPure Particles G	C14120	100 ml		● Magnetic beads for circulating/FFPE DNA/RNA isolation, 1~1.5um size silica beads	
HiPure cfDNA Mini Column	C13113	100/Bag		● Small amount of cfDNA adsorption column (4 layers of GF/F imported glass fiber filter membrane)	
HiPure CFDNA Column Set II (Vacuum method)	C13115	100/Pack		● cfDNA Column Set with extender tube, cfDNA mini column, vac connector, collection tube	
Machine					
MagMix 12 Nucleic acid Extractor	MagMix12	12 channels		● Large volume nucleic acid extractor, cell free DNA, 24 well plate, 3 plates, 4 tests / plate, maximum treatment of 2ml sample	
MagRotex 24 LV Nucleic acid Extractor	MagRotex24	24 channels		● Large volume nucleic acid extractor, cell free DNA, rotate to prevent pollution, reagent strip, 24 channels, isolate free DNA from 2-4ml plasma/serum	

Key Products

IVD3126 HiPure FFPE DNA Kit



Introduction

HiPure FFPE Nucleic acid Kit supplies a simple and rapid DNA extraction for Formalin-fixed, paraffin-embedded (FFPE) tissue and sections samples. This kit is based on silica gel column purification technology, no phenol-chloroform extraction or alcohol precipitation. The whole extraction only takes 20 minutes (not including digestion time). DNA can be directly used for downstream applications such as PCR, southern blot and viral DNA detection, etc.



Specification

Features	Specifications
Main Functions	Isolation total DNA from FFPE tissue samples
Applications	PCR, Southern Blot and viral DNA detection, etc.
Purification method	Mini spin column
Purification technology	Silica technology
Process method	Manual (centrifugation or vacuum)
Sample type	Formalin - fixed, paraffin- embedded (FFPE) tissue and sections samples
Sample amount	<20mg
Elution volume	<20 μ l
Time per run	\leq 20 minutes
Maxi volume of column	4ml
Binding yield of column	100 μ g



Advantages

- Safety - deparaffinating without contact with xylene or other toxic solution
- Fast - without overnight incubation and digestion, several samples can be extracted within 2 hours
- High efficiency - remove the formaldehyde modification of DNA, greatly enhancing the sensitivity of PCR
- High yield - most optimal process to ensure the highest recovery
- High recovery- silica gel column purification method can recover nucleic acid molecules as low as PG

Key Products

IVD3026 MagPure FFPE DNA/RNA Kit



Introduction

The Kit is specially designed for simultaneous purification of genomic DNA and total RNA from formalin-fixed, paraffin-embedded (FFPE) tissue sections. Purified DNA/RNA is suitable for use in applications such as real-time PCR and Pyrosequencing.



Specification

Features	Specifications
Main Functions	Co-isolation total RNA and DNA from FFPE tissue
Applications	RT-PCR, cDNA synthesis, PCR and second generation sequencing
Purification method	Polydisperse magnetic beads
Purification technology	Magnetic beads technology
Process method	Manual or automatic
Adaptive instrument	Nucleic acid extractor and pipetting workstation
Sample type	FFPE slice, FFPE puncture sample, embedded tissue
Sample amount	No more than six 10 μ m sections of 150mm ² surface area or three 20 μ m sections of 150mm ² surface area.



Advantages

- Post digestion sorting - higher DNA and RNA yields
- Economy – excellent performance and cost effectiveness



Principles

FFPE samples are incubated in an optimized lysis buffer, which results in the release of RNA and precipitation of DNA. After centrifugation, the RNA-containing supernatant and DNA-containing pellet are then processed separately to purify RNA and DNA. After adding magnetic particles and binding solution, DNA/RNA will be adsorbed on the surface of magnetic particles, and impurities such as proteins will be removed without adsorption. The adsorbed particles were washed with washing solution to remove proteins and impurities, washed with ethanol to remove salts, and finally DNA/RNA was eluted by RNase Free Water.

Recommended Products

Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Blood/Tissue/Saliva/Swab DNA/RNA Kit					
HiPure Universal DNA Kit	IVD3018	100		● Isolation total DNA from tissue / blood / body fluid / swab / dry blood spots	
HiPure Tissue&Blood DNA Maxi Kit	D311502	10		● Isolation total DNA from 10ml blood and 1g tissue	Qiagen51192
	D311503	50			
HiPure Tissue&Blood DNA 96 Kit	D311702	1 x 96		● Isolation total DNA from 200µl blood, tissue, culture cells, swab using 96 well bind plate	Qiagen69581
	D311703	4 x 96			
MagPure Universal DNA Kit	IVD3102	200		● Isolation total DNA from blood, buffy coat, tissue and other samples	
MagPure Universal RNA Kit	IVD3020	200		● Isolation total RNA from Blood/Tissue/Cells using magnetic beads	
HiPure Universal RNA Kit	R413002	50		● Isolation total RNA from 100mg lipid tissue, tissue, cell, plant, body fluids using columns and MagZol reagent	Qiagen74804
	R413003	250			
HiPure Total RNA Kit	R401102	50		● Isolation total RNA from 20mg tissue, 150 mg plant, 5 x 10 ⁶ cell using one column	
	R401103	250			
HiPure Blood RNA Mini Kit	R416102	50		● Isolation total RNA from 1-1.5ml whole blood	Qiagen52304
	R416103	250			
MagPure Blood RNA Kit	D661101	48		● Isolation total RNA from 200~300µl blood, buffy coat, body fluids	
	D661102	96			
	D661103	480			
Columns/Magnetic Beads					
MagPure Particles	C14100	100 ml		● Magnetic beads for gDNA/RNA, viral DNA/RNA isolation, 1.5-5µm size silica beads	
MagPure Particles N	C14110	100 ml		● Magnetic beads for viral DNA/RNA extraction, plasmid, DNA/RNA Clean Up, 0.2~2µm silica beads	
HiPure DNA Mini Column I	C13100	1000/Bag		● Small amount of DNA adsorption column (2 layers of GF / F imported glass fiber filter membrane)	
HiPure RNA Mini Column	C13111	1000/Bag		● Small amount of RNA adsorption column (3 layers of GF / B imported glass fiber filter membrane)	
Machine					
MagMix 32 Nucleic acid Extractor	MagMix32	32 channels		● Small nucleic acid extractor, 2 plates, 96 well plate, 8 magnetic sleeves, processing 1-32 samples	
MagMix 96 Nucleic acid Extractor	MagMix96	96 channels		● High throughput nucleic acid extractor, 6 plates, 96 well plate, 96 magnetic sleeves, processing 1-96 samples	

Key Products

IVD3018 HiPure Universal DNA Kit



Introduction

This product is suitable for rapid extraction of total DNA from tissue, cells, blood, saliva, swabs, blood spots, semen and other clinical samples. DNA can be used directly for PCR, quantitative PCR, Southern Blot, test of virus DNA and so on.



Specification

Features	Specifications
Main Functions	Isolation total DNA from tissue / blood / body fluid / swab /dry spots Isolation total DNA from FFPE tissue samples
Applications	PCR, qPCR, southern bolt and virus detection, etc.
Purification method	Mini spin column
Purification technology	Silica technology
Process method	Manual (centrifugation or vacuum)
Sample type	Tissue, cell, blood, saliva, swab, blood spot, semen and other clinical sarr
Sample amount	Solid tissue : 1-10mg, Anticoagulant blood : 200µl
Yield	1 - 15µg
Elution volume	≥20µl
Time per run	30 - 60 minutes
Maxi volume of column	750µl
Binding yield of column	100µg



Advantages

- High quality DNA - meet a variety of downstream applications, including PCR, qPCR, enzyme digestion, hybridization, etc.
- Fast - without separation of leukocytes, organic extraction or ethanol precipitation
- Simple - all nucleic acids can be obtained by direct digestion
- Wide applicability - It can handle various liquid samples, animal tissues and cultured cells

Key Products

IVD3102 MagPure Universal DNA Kit



Introduction

This product is suitable for rapid extraction of total DNA from tissue, cells, blood, saliva, swabs, blood spots, semen and other clinical samples. DNA can be used directly for PCR, quantitative PCR, Southern Blot, test of virus DNA and so on.



Specification

Features	Specifications
Main Functions	Isolation total DNA from blood, buffy coat, tissue and other s
Applications	Second generation sequencing, PCR, real time PCR, etc.
Purification method	Polydisperse magnetic beads
Purification technology	Magnetic beads technology
Process method	Manual or automatic
Sample type	Anticoagulant blood, concentrated blood, buffy coat, lymphc cultured cells
Sample amount	Whole blood :< 200; Saliva / swab:< 400, Tissue :< 20mg
Yield	0.1 - 50µg



Advantages

- High purity - OD 260 / 280 : 1.7- 1.9, OD 260 / 230 : 1.5 - 2.0
- Economy - less than 50% of the price of Qiagen
- High yield - most optimal process , ensuring the recovery up to 90%
- Strong processing ability – samples including animal blood, cultured cells, animal tissues, etc.



Principle

This product is based on the purification method of high binding magnetic particles. The sample is lysed and digested under the action of lysate and protease. DNA is released into the lysate. After adding magnetic particles and binding solution, DNA will be adsorbed on the surface of magnetic particles, and impurities such as proteins will be removed without adsorption. The adsorbed particles were washed with washing solution to remove proteins and impurities, washed with ethanol to remove salts, and finally DNA was eluted by Elution Buffer.

Key Products

IVD3020 MagPure Universal RNA Kit



Introduction

This kit is suitable for high-throughput extraction of total RNA from cultured cells, cell suspensions, animal tissues, conventional fungi and plant tissues. The kit is based on superparamagnetic magnetic particle purification technology. The extraction process does not require the use of toxic phenolic chloroform extraction or time-consuming alcohol precipitation. The whole extraction process only takes 60 minutes. The obtained RNA can be directly used in RT-PCR, fluorescence quantification, second-generation sequencing and viral RNA detection and so on. It is suitable to use on 32/48/96 channel nucleic acid extractors (such as KingFisherFle, MagMix32, MagMix 96) and pipetting workstation (Hamilton, Tican) for automatic extraction.



Specification

Features	Specifications
Main Functions	Isolation total RNA from tissue, cell
Applications	RT-PCR, cDNA synthesis, second generation sequencing
Purification method	Polydispersemagnetic beads
Purification technology	Magnetic beads technology
Process method	Manual or automatic
Adaptive instrument	Nucleic acid extractor, pipetting workstation
Sample type	Tissues, cells, lymphocytes and other clinical sample
Sample amount	Cells grown insuspension: $\leq 1 \times 10^7$ Animal tissue: $\leq 20\text{mg}$ Plant tissue: $\leq 100\text{mg}$ Whole blood: $\leq 1.5\text{ml}$
Yield	2-50 μg



Advantages

- High purity - OD260 / 280 : 1.9-2.0, OD 260 / 230 : 1.5-2.0
- Economy - less than 50% of the price of Qiagen and other imported products
- Automatic - extraction without manual participation, saving time and effort
- Universal - suitable for various clinical samples

Magen supply two series of viral/pathogen nucleic acid extraction kits, HiPure and MagPure. HiPure Viral Nucleic Acid Kits based on silica spin column technology, extract viral/pathogen DNA/RNA from plasma, serum, non-cells viral, ect biology samples rapidly. Users can get DNA/RNA from different samples in 30 min. Process contains lysis, column combining, elution, and at last get DNA/RNA by nuclease-free water elution.

MagPure viral/pathogen nucleic acid kit uses magnetic beads technology getting viral/pathogen DNA/RNA from different source of biology samples in high-throughput. It can be used with both manual operation and automatic extraction workstation like BeckMek Tican, Hamilton, Cliper, Abbott M2000, Etc. Magen also design pre-mixed reagent kits specially for KingFisher and Magen automatic extraction machines.

During covid-19, Magen had supplied **over 100 million preps** viral kits all over the world, which manifested the reliability and stability of the product.

Recommended Products

Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Viral/Pathogen DNA/RNA Kit					
HiPure Viral RNA Kit	R417102	50		● Extract viral RNA from 140µl non-cell/low cell content samples	
	R417103	250			Qiagen52904
HiPure Viral RNA/DNA Kit	IVD4173	100		● Extract viral RNA/DNA from 200µl non-cell/low cell content samples	Qiagen57704
HiPure Pathogen RNA/DNA Kit	IVD4179	50		● Extract viral RNA/DNA from samples for mNGS, remove background nucleic acid	
MagPure Viral DNA/RNA Kit	IVD5412	200		● Extract viral DNA/RNA from 200µl non-cell/low cell content samples by magnetic beads	Life:Am18365
MagPure Pathongen DNA/RNA Kit	IVD6672	200		● Extract total pathogen from non-cell/low cell content biological samples f or PCR downstream application	Life: A36716
MagPure Pathogen DNA/RNA Kit C	R667202C	96		● Extract Pathogen RNA/DNA from samples by magnetic beads. Remove background nucleic acid, recommend for mNGS.	
Columns/Magnetic Beads					
MagPure Particles	C14100	100 ml		● Magnetic beads for gDNA/RNA, viral DNA/RNA isolation, 1.5-5µm size silica beads	
MagPure Particles N	C14110	100 ml		● Magnetic beads for viral DNA/RNA extraction, plasmid, DNA/RNA Clean Up, 0.2~2µm silica beads	
HiPure Viral Mini Column	C13112	1000/Bag		● Small amount of virus total nucleic acid adsorption column (3 layers of GF / F imported glass fiber filter membrane)	
HiPure DNA Mini Column I	C13100	1000/Bag		● Small amount of DNA adsorption column (2 layers of GF / F imported glass fiber filter membrane)	
HiPure RNA Mini Column	C13111	1000/Bag		● Small amount of RNA adsorption column (3 layers of GF / B imported glass fiber filter membrane)	
Machine					
MagMix 32 Nucleic acid Extractor	MagMix32	32 channels		● Small nucleic acid extractor, 2 plates, 96 well plate, 8 magnetic sleeves, processing 1-32 samples	
MagMix 96 Nucleic acid Extractor	MagMix96	96 channels		● High throughput nucleic acid extractor, 6 plates, 96 well plate, 96 magnetic sleeves, processing 1-96 samples	

Key Products

IVD5412 MagPure Viral DNA/RNA Kit

- IVD5412-F-96 IVD5412 prepacked kit for 96 channel extractor
- IVD5412-TL-96 IVD5412 prepacked kit for 32/48 channel extractor



Introduction

This product is suitable for extracting total viral nucleic acid from cell-free/low-content cell biological samples such as body fluids, serums, plasma, soaking solutions, tissue homogenate supernatant, and culture supernatant. The Purified DNA/RNA is used for RT-PCR and PCR detection.



Specification

Features	Specifications
Main Functions	Extract viral DNA/RNA from 200µl samples by magnetic beads
Applications	RT - PCR, PCR, NGS
Purification method	Polydisperse magnetic beads
Purification technology	Magnetic beads technology
Process method	Manual or automatic
Adaptive instrument	Nucleic acid extractor, pipetting workstation
Sample type	Tissues, cells, lymphocytes and other clinical sample
Sample amount	200µl



Advantages

- Fast - several samples can be extracted in 40 minutes by column method
- High quality - high purity total RNA / DNA can be directly used in various sensitive downstream applications
- Safe - no phenol chloroform extraction required
- Sensitive - DNA/RNA can be recovered at the level of PG

Key Products

R6672C MagPure Pathogen DNA/RNA Kit C



Introduction

This kit is suitable for extracting total pathogen nucleic acid from a variety of clinical samples (including serum and plasma). The kit is based on super paramagnetic particles purification technology. Purified DNA/RNA is ready for downstream applications such as Real Time PCR, biochip analysis, NGS and other related experiments.



Specification

Features	Specifications
Main Functions	Extract Pathogen RNA/DNA from 0.5-1.5ml whole blood, plasma, serum, body fluid, homogenate suspension, culture solution, cell suspension, soaking solution or concentrate pathogen solution for mNGS application, remove host background nucleic acid.
Applications	Real Time PCR, biochip analysis, NGS
Products	Pathogen DNA / RNA
Purification method	Polydisperse magnetic beads
Purification technology	Magnetic beads technology
Process method	Manual or automatic
Adaptive instrument	Nucleic acid extractor, pipetting workstation
Sample type	whole blood, plasma, serum, body fluid, homogenate suspension, culture solution, cell suspension, soaking solution or concentrate pathogen solution
Sample amount	0.5 - 1.5 ml



Related Product

IVD6672 MagPure Pathogen DNA/RNA Kit

---Extract total pathogen nucleic acid from cell-free/low-content cell biological samples such as body fluids, serums, plasma, tissue homogenate supernatant.

Recommend used for PCR application, substitute to Thermo Fisher: AM18365

Recommended Products

Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Plant DNA/RNA Kit					
HiPure SF Plant DNA Kit	D316402	50		● Isolation total DNA from 100 mg simple plant without chloroform	Qiagen69104
	D316403	250			
HiPure Plant DNA Mini Kit	D318702	50		● Isolation total DNA from 150 mg plant and fungal tissue	
	D318703	250			
HiPure Plant RNA Kit	R415102	50		● Isolation total RNA from 150 mg plant using two columns (gDNA removed column)	Qiagen74904
	R415103	250			
MagPure Plant DNA Kit	D635101	48		● Isolation total DNA from 50-100 mg plant, fungal tissue	
	D635102	96			
	D635103	5x96			
MagPure Seed DNA Kit	D635201	48		● Isolation total DNA from 50-100 mg easy-grinded plant (tender leaf) and seed	
	D635202	96			
	D635203	5x96			
MagPure Plant RNA Kit	D664101	48		● Isolation total RNA from 50mg plant using magnetic particles	
	D664102	96			
	D664103	480			
Columns/Magnetic Beads					
MagPure Particles	C14100	100 ml		● Magnetic beads for gDNA/RNA, viral DNA/RNA isolation, 1.5-5µm size silica beads	
MagPure Particles N	C14110	100 ml		● Magnetic beads for viral DNA/RNA extraction, plasmid, DNA/RNA Clean Up, 0.2~2µm silica beads	
HiPure DNA Mini Column I	C13100	1000/Bag		● Small amount of DNA adsorption column (2 layers of GF / F imported glass fiber filter membrane)	
HiPure RNA Mini Column	C13111	1000/Bag		● Small amount of RNA adsorption column (3 layers of GF / B imported glass fiber filter membrane)	
Machine					
MagMix 32 Nucleic acid Extractor	MagMix32	32 channels		● Small nucleic acid extractor, 2 plates, 96 well plate, 8 magnetic sleeves, processing 1-32 samples	
MagMix 96 Nucleic acid Extractor	MagMix96	96 channels		● High throughput nucleic acid extractor, 6 plates, 96 well plate, 96 magnetic sleeves, processing 1-96 samples	

Key Products

D3187 HiPure Plant DNA Mini Kit

Introduction

HiPure Plant DNA Mini Kit supplies a simple and rapid extraction of genomic DNA from different plant samples. The kit is based on silica gel column and CTAB lysis purification technology. The whole extraction process is only 30-50 minutes. Purified DNA can be used directly for PCR, SSR, AFLP, RAPD and Southern Blot, etc.



Specification

Features	Specifications
Main Functions	Isolation total DNA from 150 mg plant and fungal tissue
Applications	PCR, SSR, AFLP, RAPD and southern blot, etc.
Purification method	Mini spin column
Purification technology	Silica technology
Process method	Manual (centrifugation or vacuum)
Sample type	Fresh / frozen plant samples, dried plant / seed samples
Sample amount	Fresh / frozen plant samples: 50 - 150 mg Dried plant / seed samples: 15 - 40 mg
Elution volume	≥40μl
Time per run	30 - 50 minutes
Maxi volume of column	800μl
Binding yield of column	100μg

Principles

This product is based on silica column purification. The sample is lysed with CTAB Buffer. DNA is released into the lysate. Cell debris, precipitated proteins and polysaccharides are removed by chloroform extraction. After adjust the binding condition, transfer to an adsorption column. DNA is adsorbed on the membrane, while protein is not adsorbed and is removed with filtration. After washing proteins and other impurities, nucleic acid was finally eluted with low-salt buffer (10mm Tris, pH9.0, 0.5mm EDTA).

Key Products

D6351 MagPure Plant DNA Kit



Introduction

MagPure Plant DNA Kit supplies a simple and rapid extraction of genomic DNA from different plant pieces and tissues. The kit is based on superparamagnetic particles purification technology, no phenol-chloroform extraction or alcohol precipitation. The whole extraction only takes 60 minutes. This kit can be used on different automatic extraction machines like KingFisher ML, KingFisher Flex and KingFisher Duo. Purified DNA can be used directly for PCR, quantitative PCR, southern blot, hybridization, and transgenesis detection.



Specification

Features	Specifications
Main Functions	Isolation total DNA from 50- 100 mg plant, fungal tissue
Applications	PCR, transgene detection, fluorescence quantitative PCR, southern blot, SNP site analysis, etc.
Purification technology	Magnetic beads technology
Process method	Manual or automatic
Sample type	Conventional economic plant samples
Sample amount	Fresh / frozen plant samples: ≤ 100 mg Dried plant / seed samples: ≤ 20 mg
Elution volume	$\geq 50\mu\text{l}$
Time per run	≤ 60 minutes



Principles

This product is based on the purification method of high binding magnetic particles. The sample is lysed and digested under the action of lysate and Protease. DNA is released into the lysate. After adding magnetic particles and binding solution, DNA will be adsorbed on the surface of magnetic particles, and impurities such as proteins will be removed without adsorption. The adsorbed particles were washed with washing solution to remove proteins and impurities, washed with ethanol to remove salts, and finally DNA was eluted by Elution Buffer.

Magen DNA micro kit is suitable for rapid extraction of trace DNA from blood, tissue, blood stain, seminal spots, urine, and other trace samples. It has been designed to improve the yield, concentration, and purity of DNA isolated from trace samples such as forensic samples.



Recommend Products

Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Forensic Sample DNA Kit					
HiPure DNA Micro Kit	D312502	50		● Isolation total DNA from 1-10 μ l blood, <2mg tissue and other samples, widely used in Forensic Detecting	Qiagen56304
	D312503	250			
MagPure DNA Micro Kit	IVD3101	200		● Isolation total DNA from 1-100 μ l blood, FFPE, tissue and other samples using high bind beads	
Columns/Magnetic Beads					
MagPure Particles	C14100	100 ml		● Magnetic beads for gDNA/RNA, viral DNA/RNA isolation, 1.5-5 μ m size silica beads	
MagPure Particles N	C14110	100 ml		● Magnetic beads for viral DNA/RNA extraction, plasmid, DNA/RNA Clean Up, 0.2~2 μ m silica beads	
HiPure DNA Micro Column	C13011	1000/Bag		● Micro amount of DNA adsorption column (3 layers of GF / F imported glass fiber filter membrane)	
HiPure DNA Mini Column I	C13100	1000/Bag		● Small amount of DNA adsorption column (2 layers of GF / F imported glass fiber filter membrane)	
Machine					
MagMix 32 Nucleic acid Extractor	MagMix32	32 channels		● Small nucleic acid extractor, 2 plates, 96 well plate, 8 magnetic sleeves, processing 1-32 samples	
MagMix 96 Nucleic acid Extractor	MagMix96	96 channels		● High throughput nucleic acid extractor, 6 plates, 96 well plate, 96 magnetic sleeves, processing 1-96 samples	

Key Products

D3125 HiPure DNA Micro Kit

Introduction

This product provides fast and easy methods for purification of total DNA for reliable PCR and Southern blotting. Total DNA (e.g., genomic, viral, mitochondrial) can be purified from small volume of blood, tissue and dry blood spots.



Specification

Features	Specifications
Main Functions	Isolation total DNA from 10µl blood, <2mg tissue and other samples
Applications	PCR, southern bolt and virus detection, etc.
Purification method	Mini spin column
Purification technology	Silica technology
Process method	Manual (centrifugation or vacuum)
Sample type	Animal tissues, blood spots, swabs and various forensic samples
Sample amount	Blood: 1-10µl, Tissue:<2mg

Principles

This product is based on silica Column purification. The sample is lysed and digested with lysate and protease, DNA is released into the lysate. Transfer to an adsorption column. Nucleic acid is adsorbed on the membrane, while protein is not adsorbed and is removed with filtration. After washing proteins and other impurities, nucleic acid was finally eluted with low-salt buffer (10mmTris, pH9.0, 0.5mm EDTA).

Advantages

- Fast - several samples can be extracted in 20 minutes (after digestion)
- High purity - purified DNA can be directly used in various downstream applications
- High recovery - DNA can be recovered at the level of PG
- Good repeatability - silica technology can obtain ideal results every time

Recommended Products

Product Name	Cat #	Preps	Price (\$)	Feature	Substitute Products
Plant DNA/RNA Kit					
HiPure Stool DNA Kit	D314102	50		● Isolation total DNA from 50-100mg stool samples	
	D314103	250			
HiPure Soil DNA Kit	D314202	50		● Isolation DNA from 200-500mg soil sample	Qiagen47014
	D314203	250			
HiPure Bacterial DNA Kit	D314602	50		● Isolation bacterial DNA from cultures, food and other samples	
	D314603	250			
HiPure Microbiome DNA Kit	D314802	50		● Isolation gDNA from biological sample and remove host DNA	Qiagen51704
	D314803	250			
MagPure Soil DNA Kit	D635601	48		● Isolation total DNA from 250-500mg soil	Qiagen47109
	D635602	96			
	D635603	480			
MagPure Stool DNA Kit	D636401	48		● Isolation total DNA from 100-150mg stool samples	
	D636402	96			
	D636403	480			
Columns/Magnetic Beads					
MagPure Particles	C14100	100 ml		● Magnetic beads for gDNA/RNA, viral DNA/RNA isolation, 1.5-5µm size silica beads	
MagPure Particles N	C14110	100 ml		● Magnetic beads for viral DNA/RNA extraction, plasmid, DNA/RNA Clean Up, 0.2~2µm silica beads	
HiPure DNA Mini Column I	C13100	1000/Bag		● Small amount of DNA adsorption column (2 layers of GF / F imported glass fiber filter membrane)	
HiPure DNA Mini Column II	C13110	1000/Bag		● Small amount of DNA adsorption column (2 layers of GF / F imported glass fiber filter membrane)	
HiPure RNA Mini Column	C13111	1000/Bag		● Small amount of RNA adsorption column (3 layers of GF / B imported glass fiber filter membrane)	
Machine					
MagMix 32 Nucleic acid Extractor	MagMix32	32 channels		● Small nucleic acid extractor, 2 plates, 96 well plate, 8 magnetic sleeves, processing 1-32 samples	
MagMix 96 Nucleic acid Extractor	MagMix96	96 channels		● High throughput nucleic acid extractor, 6 plates, 96 well plate, 96 magnetic sleeves, processing 1-96 samples	

Key Products

D3142 HiPure Soil DNA Kit



Introduction

This product allows rapid and reliable isolation of high-quality genomic DNA from various soil samples. Up to 500 mg soil samples can be processed in 60 minute. The system combines the reversible nucleic acid binding properties of HiPure matrix with the speed and versatility of spin column technology to eliminate PCR inhibiting compounds such as humic acid from soil samples. Purified DNA is suitable for PCR, restriction digestion, and next-generation sequencing. There are no organic extractions thus reducing plastic waste and hands-on time to allow multiple samples to be processed in parallel.



Specification

Features	Specifications
Main Functions	Isolation DNA from 200-500mg soil sample
Applications	PCR, southern blot and enzyme digestion, etc.
Purification method	Mini spin column
Purification technology	Silica technology
Process method	Manual (centrifugation or vacuum)
Sample type	Soil
Sample amount	200-500mg
Elution volume	≥30μl
Time per run	≤60minutes
Maxi volume of column	800μl
Binding yield of column	100μg



Advantages

- Fast - several samples can be extracted in 40 minutes (after digestion)
- High purity - purified DNA can be directly used in various downstream applications
- Good repeatability - silica technology can obtain ideal results every time
- High recovery - DNA can be recovered at the level of PG

Key Products

D6364 HiPure Soil DNA Kit



Introduction

MagPure Stool DNA Kit is specially designed for high throughput DNA extraction from stool samples. It can get high purity microbial DNA from stool samples (200mg). This kit is based on magnetic beads purification and unique inhibiting factors adsorption technology, no phenol-chloroform extraction or alcohol precipitation. It can adsorb humic acid and other inhibiting factors in the solution efficiently. DNA can be directly used for downstream applications such as PCR, Viral DNA testing, bacterial DNA testing, etc.



Specification

Features	Specifications
Main Functions	Isolation total DNA from 100-150mg stool samples
Applications	PCR, southern blot and enzyme digestion, etc.
Purification technology	Magnetic beads technology
Process method	Manual or automatic
Sample type	Stool
Sample amount	100-150 mg



Advantages

- Fast - several samples can be extracted in 60 minutes (after digestion)
- High purity - unique adsorbent can completely remove inhibitory factors
- High recovery - DNA can be recovered at the level of PG



Articles

- 【Nature Communications】 Microalgae-based oral microcarriers for gut microbiota homeostasis and intestinal protection in cancer radiotherapy
- 【Journal of Crohns & Colitis】 Gut Epithelial-derived CXCL9 Maintains Gut Homeostasis Through Preventing Overgrown E. coli
- 【Nature Communications】 Inorganic nanosheets facilitate humoral immunity against medical implant infections by modulating immune co-stimulatory pathways.



Purification beyond your imagination

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