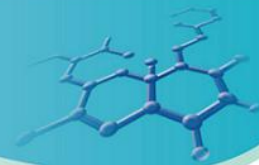




Clear Brook, VA 22624

800-842-4752 •• Sales@hplc.com

Your source for innovative
Biomiga Products



Featured Product Catalog

Biomiga, Inc. is an innovative biotech research and service company based in San Diego, California. Our mission is to provide the highest quality laboratory products while maintaining the best possible service and support to our end-users.

- Biomiga owns the manufacturing process, enabling us to control both the quality of the products as well as the price.
- Biomiga can customize its products to meet a client's exact specifications and requirements.
- Biomiga provides full service support to all our clients through the entire process.
- Biomiga emphasizes on product development.

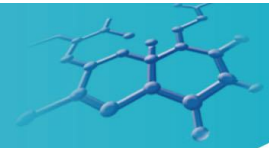
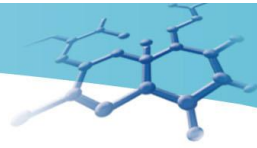
About Us

Since 2004, Biomiga has excelled at researching and developing new processes in the spheres of biomedical and pharmaceutical products. With the knowledge and expertise gained through these experiences, we have been able to integrate our research with our offerings to optimize our products and services.

Featured Products

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DNA/RNA Purification Kits

Catalog #	Product Name	Preps	Yield
PD1211-01	Plasmid mini kit	50	Up to 40 µg /1-5 mL culture
PD1211-02	Plasmid mini kit	250	Up to 40 µg /1-5 mL culture
PD1213-01	Plasmid mini kit II	50	Up to 120 µg /5-10 mL culture
PD1213-02	Plasmid mini kit II	250	Up to 120 µg /5-10 mL culture
DC3511-01	Gel extraction kit	50	Bfr: Sample = 1:1, Elution 15 µL
DC3511-02	Gel extraction kit	250	Bfr: Sample = 1:1, Elution 15 µL
DC3514-01	PCR Cleaning kit	50	Bfr: Sample = 1:1, Elution 15 µL
DC3514-02	PCR Cleaning kit	250	Bfr: Sample = 1:1, Elution 15 µL
PD1411-01	Plasmid midi kit	10	200-400 µg /25-50 mL culture
PD1411-02	Plasmid maxi kit	25	200-400 µg /25-50 mL culture
PD1511-01	Plasmid maxi kit	10	0.5-1.2 mg /100-250 mL culture
PD1511-02	Plasmid maxi kit	25	0.5-1.2 mg /100-250 mL culture
R6311-01	Tissue/Cell RNA mini kit	50	≤100 µg/5x106 cells or 30 mg tissue
R6311-02	Tissue/Cell RNA mini kit	250	≤100 µg/5x106 cells or 30 mg tissue
R6321-01	Tissue/Cell RNA mini plus	50	Plus gDNA clearance columns
R6321-02	Tissue/Cell RNA mini plus	250	Plus gDNA clearance columns
GD2211-01	Tissue Genomic DNA kit	50	Process 30 mg of tissue
GD2211-02	Tissue Genomic DNA kit	250	Process 30 mg of tissue
PD1812-01	96 well plasmid miniprep kit	4x96	1-2 mL culture 10 -12 µg
PD1812-02	96 well plasmid miniprep kit	20x96	1-2 mL culture 10 -12 µg

Transfection Grade Minipreps

A Revolutionary Endofree Plasmid Miniprep Kit- Save time and cost!

- Unmatched product: A breakthrough endotoxin removal miniprep system- No phase separation and precipitation.
- Fast procedure works like regular miniprep.
- Produce 30 - 70 µg of low endotoxin plasmid DNA within 30 minutes.
- Produce 10-30 µg of low endotoxin plasmid DNA within 60 minutes in 96 well format.
- Endotoxin < 1 EU/ µg
- Suitable for transfection of endotoxin sensitive cell lines and primary cells.
- Available both single column and 96-well format.
- The most competitive price on market.

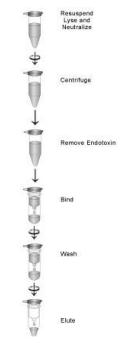
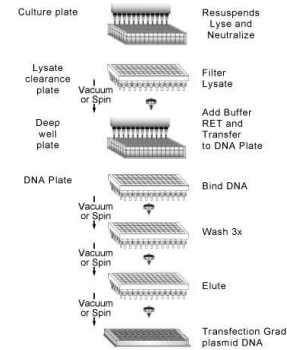


Fig 1: 96 Well Endofree Plasmid Miniprep

Fig 2: Endofree Plasmid Miniprep

Catalog #	Product Name	Preps	Yield
PD1220-01	Ezflow endofree Plasmid mini kit I	50	Up to 30 µg /1-5 mL culture
PD1220-02	Ezflow endofree Plasmid mini kit I	250	Up to 30 µg /1-5 mL culture
PD1222-01	Ezflow endofree Plasmid mini kit II	50	Up to 70 µg /5-10 mL culture
PD1222-02	Ezflow endofree Plasmid mini kit II	250	Up to 70 µg /5-10 mL culture
PD1420-01	Ezflow endofree Plasmid midiprep	10	Up to 500 µg /100 mL culture
PD1420-02	Ezflow endofree Plasmid midiprep	25	Up to 500 µg /100 mL culture
PD1520-01	Ezflow endofree Plasmid maxiprep	10	Up to 1 mg / 250 mL culture
PD1520-02	Ezflow endofree Plasmid maxiprep	25	Up to 1 mg / 250 mL culture
PD1818-01	Endofree 96-well plasmid kit	4x96	1-2 mL culture 10 -12 µg
PD1818-02	Endofree 96-well plasmid kit	20x96	1-2 mL culture 10 -12 µg

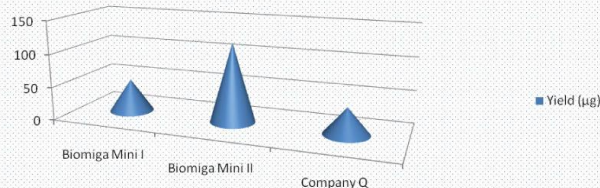


Agarose Gel Electrophoresis of plasmid DNA purified using the EzFlow™ Plasmid Miniprep Kit.
Lane M: DNA Ladder
Lane 1, 2, 3 and 4: pCDNA3.1 derived plasmid DNA

MiniPrep Kit



The highest yield plasmid miniprep



RNA Isolation Kits

- Fast and reliable procedure delivering high-quality total RNA within 30 minutes
- Stable high quality RNA for high performance in any downstream application
- Consistent RNA yields from small amounts of starting material
- No phenol/chloroform extraction, no CsCl gradients, no LiCl or ethanol precipitation
- gDNA can be removed by gDNA removal column or plate (R6321 and R6818).
- The gDNA removal columns also homogenize samples like shredders.

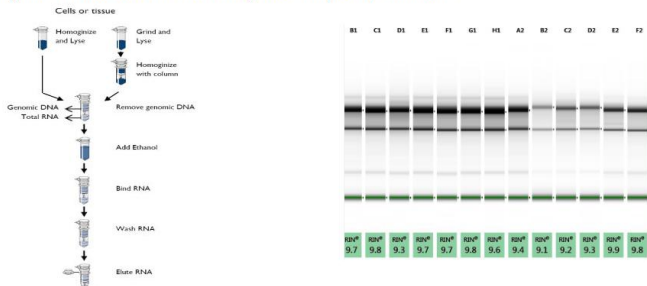


Fig. RNA Miniprep Plus kit flow chart

RNAs of shRNA knockdown clones from HT29 cells were purified using Biomiga's RNA mini kit

Catalog #	Description	Preps	Details
R6311-01	Tissue/Cell RNA mini kit	50	≤100 µg/5x10 ⁶ cells or 30 mg tissue
R6311-02	Tissue/Cell RNA mini kit	250	≤100 µg/5x10 ⁶ cells or 30 mg tissue
R6321-01	Tissue/Cell RNA mini plus	50	≤100 µg/5x10 ⁶ cells or 30 mg tissue Plus gDNA removal columns
R6321-02	Tissue/Cell RNA mini plus	250	≤100 µg/5x10 ⁶ cells or 30 mg tissue Plus gDNA removal columns
R6818-01	96 well Tissue/Cell RNA plus	4x96	≤100 µg/5x10 ⁶ cells or 30 mg tissue Plus gDNA removal plate
R6818-02	96 well Tissue/Cell RNA plus	20x96	≤100 µg/5x10 ⁶ cells or 30 mg tissue Plus gDNA removal plate

Recent publication cited Biomiga's RNA purification kits.

Nature (2011) doi:10.1038/nature09707

Tumor-infiltrating regulatory T cells stimulate mammary cancer metastasis through RANKL-RANK signaling.

JBC (2011) doi: 10.1074/jbc.M110.212597

RECEPTOR TYPE PROTEIN TYROSINE PHOSPHATASE BETA (RPTP-β) DIRECTLY DEPHOSPHORYLATES AND REGULATES HEPATOCYTE GROWTH FACTOR RECEPTOR (HGFR/MET) FUNCTION.

Molecular Brain, 2015 8:33

Full UPF3B function is critical for neuronal differentiation of neural stem cells

Microbiol., 09 November 2015

The Membrane Proteins Involved in Virulence of Cronobacter sakazakii Virulent G362 and Attenuated L3101 Isolates

1st Strand cDNA Synthesis and PCR Related Products

The Ezgene Express 1st Strand cDNA Synthesis System is optimized to synthesize high yield cDNA from total or poly(A)+ purified RNA. The system can be used with a broad range of RNA template concentrations, from as low as 10 pg to as high as 5 µg of total RNA. The Express 1st Strand cDNA Synthesis reverse transcriptase is a mixture of Script reverse transcriptase, an engineered MMLV RT and a ribonuclease inhibitor protein.

Components

- Script RT and RNase inhibitor mix
- cDNA Synthesis Buffer
- RNA annealing buffer OT (contains Oligo (dT)20)
- RNA annealing buffer RH (contains Random Hexamer)
- Nuclease-free water

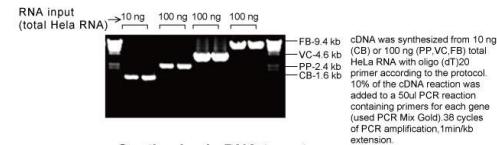
FS01-02

- (50 Rxn)
- 50 µl
 - 500 µl
 - 250 µl
 - 250 µl
 - 1.0 ml

FS01-03

- (100 Rxn)
- 100 µl
 - 1.0 µl
 - 500 µl
 - 500 µl
 - 1.0 ml

Express 1st Strand cDNA Synthesis



Synthesized cDNA targets up to 9.4 kb with high yield



Detected mRNA target with 10 pg of total RNA

PCR Related Products

Catalog #	Product Name	Size
NT01-01	dNTP mix, 10 mM each	500 µL
NT01-02	dNTP mix, 10 mM each	2 mL
NT01-02	dNTP mix, 10 mM each	5 mL
NT02-01	dNTP mix, 100 mM each	4x250 µL
NT02-02	dNTP mix, 100 mM each	4x1 mL
E121-01	Taq DNA polymerase, 5u/ µL	500 units
E121-02	Taq DNA polymerase, 5u/ µL	1000 units
E121-03	Taq DNA polymerase, 5u/ µL	5000 units
TP01-01	2x Taq PCR mix	5x 1mL
TP01-02	2x Taq PCR mix	20x 1mL
RT0201-01	One step RT-PCR kit	25 Rxn
RT0201-02	One step RT-PCR kit	50 Rxn
RT0201-03	One step RT-PCR kit	100 Rxn
RT0201-04	One step RT-PCR kit	250 Rxn
FS01-01	1st strand cDNA synthesis kit	20 Rxn
FS01-02	1st strand cDNA synthesis kit	50 Rxn
FS01-03	1st strand cDNA synthesis kit	100 Rxn

Blood & Tissue gDNA Purification Kits

Introduction

The EZgene™ genomic DNA kits offer easy and efficient method for isolation of gDNA from a wide variety of fresh or frozen samples including animal tissues, cultured cells, whole blood, buffy coat, blood clot, lymphocytes, plasma, serum, bacterial, yeast and FFPE samples, etc. There is no need for phenol/chloroform extractions, and time-consuming ethanol precipitation steps. Purified DNA can be directly used for most applications such as PCR, Southern Blotting, and RFLP.

Product Features and Benefits

- Unmatched versatile: A proprietary formulated buffer system allows the isolation of gDNA from blood clot
- High purity-DNA can be used for most downstream applications
- Reliability- High quality DNA purification from variety of samples
- Speed- Fast, easy and convenient protocols
- Spin-column and 96-well high-throughput formats
- Silicon membrane and magnetic beads systems

Applications

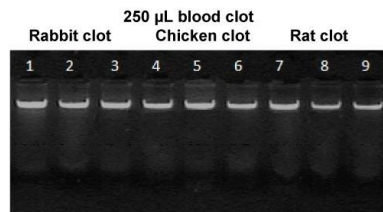
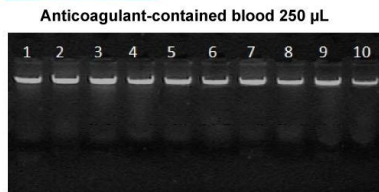


Fig1 and 2: Agarose gel analysis of gDNA purified by EZgene™ genomic DNA kits

Product Information

Product name	Catalog#	Size
Blood gDNA Mini Kit	GD2311-01	50
	GD2311-02	250
Blood Clot gDNA Mini Kit NEW	GD2322-01	50
	GD2322-02	250
Tissue gDNA Mini Kit	GD2211-01	50
	GD2211-02	250
Bacterial gDNA Kit	GD2411-01	50
	GD2411-02	250
96-well blood gDNA kit	GD2815-01	4x96
	GD2815-02	20x96

For more genomic DNA isolation product information, please visit www.biomiga.com

Recent publication cited Biomiga's genomic DNA purification kits:

Biotechnology, 2017, Volume 16, Issue 1, Pages 10-18
Zhenglong Wang, Ying Sun, Yaru Shi, Wenteng Song and Chunyang Zhang
Cloning, Expression and Characterization of a Mesophilic Catechol 1,2-dioxygenase from *Rhodococcus ruber* OA1

World J Pediatr, Vol 12 No 4, November 15, 2016
Yan Gao, Fang Jiang, Zhiying Ou

Virus Purification System

General Specifications

- Designed for instant and efficient purification of AV, AAV2, AAV5, AAV8, LV, RV and HCV.
- Time saving procedure: 90-120 minutes.
- No CsCl gradient preparation and ultracentrifugation
- High purity and virus recovery (> 60-90%).

Application

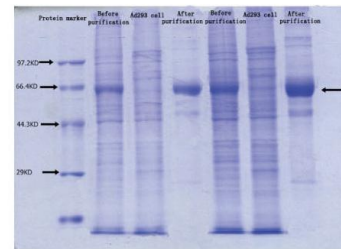


Fig 2 SDS-PAGE image of viruses before and after purification.

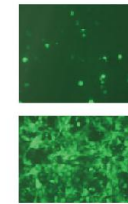
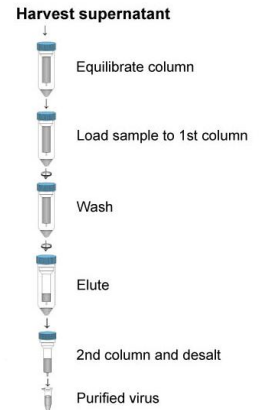


Fig 3 Infection efficiency of UT-7 before purification and after purification.



Product information

Catalog Number	Product Name	Preps
V1160-01/-02	Adenovirus Purification Mini Kit	10/20Preps
V1260-01/-02	Adenovirus Purification Maxi Kit	4/10Preps
V1169-01/-02	Adenovirus Associate Virus Purification Mini Kit	10/20Preps
V1269-01/-02	Adenovirus Associate Virus Purification Maxi Kit	4/10Preps
V1170-01/-02	Lentivirus Purification Mini Kit	10/20Preps
V1270-01/-02	Lentivirus Purification Maxi Kit	4/10Preps
V1172-01/-02	Retrovirus Purification Mini Kit	10/20Preps
V1272-01	Retrovirus Purification Maxi Kit	4/10Preps
V1369-01/-02	Adenovirus Associate Virus Purification Mini Kit	10/20Preps
V1469-01/-02	Adenovirus Associate Virus Purification Maxi Kit	4/10Preps

Transfection Reagents

Major Features

GeneTran III is a proprietary formulation for the transfection of nucleic acids (DNA and RNA) into eukaryotic cells providing the following advantages:

- Exceptional efficiency of transfection for a broad range of cell types.
- No or extremely low cytotoxicity in many primary cell types.
- High levels of recombinant protein production at 24-72 hours after transfection.
- Transfection efficiency not affected by serum. Works equally well in serum-containing (up to 20% FBS) or serum-free media.
- Works very well for both single DNA transfection and multi-DNA co-transfection.
- Works very well for siRNA transfection.
- Highly robust and requires minimal optimization.

Table 1. Cell lines transfected with GeneTran III and correspondent transfection efficiencies

Cell Line	Resource	Transfection efficiency (%)
Be(2)C	Human Neuroblastoma	80
BHK-21	Hamster Kidney	70
CHO	Hamster Ovary	95
COS-7	Monkey Kidney	95
C2C12	Mouse Myoblast	60
HEK-293	Human Kidney	99
Hela	Human Cervical Carcinoma	95
MDCK	Dog Kidney	50
MCF-7	Human breast adenocarcinoma	80
PC12	Rat pheochromocytoma	85

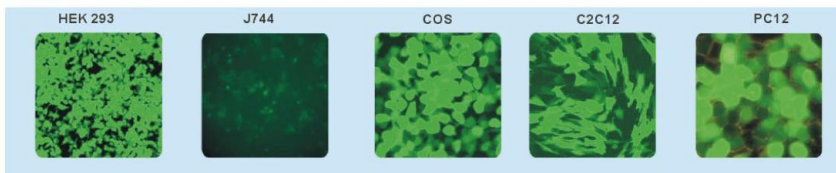


Fig 1. Image of transfected cells using GeneTran reagents

Product Information

Catalog #	Product Name	Size
GT2211-01	GeneTran III Lipid	1.0 mL
GT2211-02	GeneTran III Lipid	10x 1 mL

Recent publication cited this product,

BMC Research Notes, 2015, 8(1):616

Pineda G, Shen Z, Chen J, etc.

Proteomics studies of the interactome of RNA polymerase II C-terminal repeated domain

J Biolom Screen March 4, 2011 Alantolactone Inhibits Cell Proliferation by Interrupting the Interaction between Cripto-1 and Activin Receptor Type II A in Activin Signaling Pathway

Biol Reprod. 2009 October; 81(4): 749–758. Platelet-Derived Growth Factor C Is Upregulated in Human Uterine Fibroids and Regulates Uterine Smooth Muscle Cell Growth

DNA Markers

General Specifications

Catalog #	Product Name	Size
DM01	PCR Ladders, 500 µL	100 Lanes
DM02	1 KB DNA Ladders, 500 µL	100 Lanes

Features (DM02): 1 KB DNA ladders

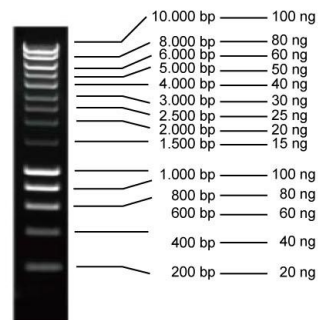
Dye-Mixed 100 bp DNA Ladder is suitable for use as a molecular weight standard (100 bp-1,500 bp) for agarose gel electrophoresis. The DNA Ladder consists of 11 DNA fragments between 100 and 1500 bp in multiples of 100 bp. The 500 bp fragment has increased intensity as a reference band. The concentration of DNA is ~0.03 µg /µL.

- Ideal for low to high DNA mass ladder (200 bp to 10,000 bp)
- 6X Loading Dye consist of 60 mM Tris-HCl (pH 7.5), 25 mM NaCl, 60 mM EDTA, 0.3% bromophenol blue, and 30% glycerol.
- The DNA mass in each band as follows (assuming 5 ul loading)

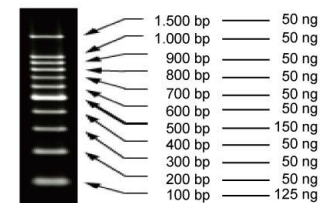
Features (DM01): 100 bp DNA ladders

100 bp DNA Ladder is suitable for use as a molecular weight standard (100 bp-1,500 bp) for agarose gel electrophoresis. The DNA Ladder consists of 11 DNA fragments between 100 and 1500 bp in multiples of 100 bp. The 500 bp fragment has increased intensity as a reference band. The concentration of DNA is ~0.1 µg /µL.

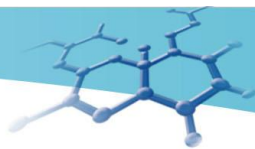
- The 500 bp fragment is enhanced
- The approximate DNA mass in each band as follows (assuming 5 ul loading)
- 6X loading dye consist of 60 mM Tris-HCl(pH 7.5), 25 mM NaCl, 60 mM EDTA, 0.3% bromophenol blue, and 30% glycerol



1 kb DNA marker 0.8 % Agarose gel



100 bp DNA Ladder 1.5% agarose gel



DNA/RNA Purification with Paramagnetic Beads

MgPure Seq DyeT Removal Kit

- Designed for dye terminator reactions clean-up prior to automated sequencing analysis.
- Comparable with BigDye V3.1 and 1.1 and other commonly used dyes
- Suitable for most robotic workstations.
- Phred 20 scores greater than 700
- Pass rate greater than 90%.
- 96 or 384 well format

Catalog #	Product Name	Size
M1813-01	MgPure Seq DyeT Removal kit	50mL
M1813-02	MgPure Seq DyeT Removal kit	500mL

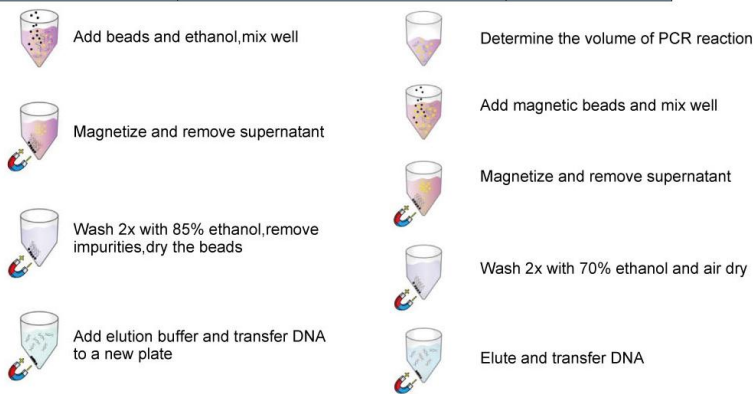


Fig 1: MgPure Seq DyeT Removal Kit

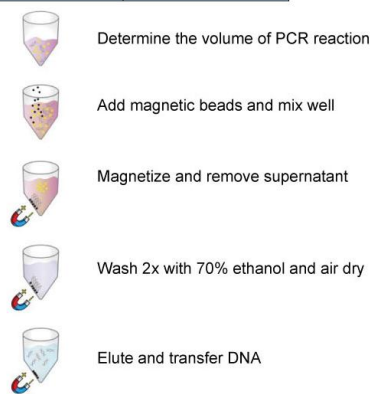
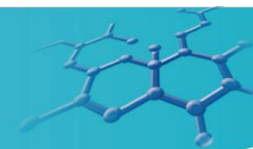


Fig 2: MgPure PCR Cleanup Kit

MgPure PCR Purification Kit

- Efficient recovery of amplicons > than 100 bp
- Efficient removal of unincorporated dNTPs, primers, primer dimers, salts and other contaminants
- Stable PCR products post-cleanup: no PCR degradation after storage at 4°C for 10 days.
- Both double stranded and single stranded DNA templates are recovered efficiently.
- 12-month shelf-life
- Suitable for manual and automated 96- or 384-well formats.

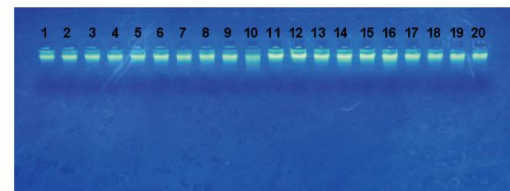
Catalog #	Product Name	Size
M1101-01	MgPure PCR Purification kit	10mL
M1101-02	MgPure PCR Purification kit	100mL
M1101-03	MgPure PCR Purification kit	500mL



MgPure 96 well blood gDNA kit (up to 200 uL)

- Purify 96 samples within 1 hour.
- No organic extractions.
- Guaranteed high quality DNA for downstream applications.
- High quality gDNA can be extracted from fresh, frozen, dried whole blood, plasma, serum, bone marrow and body fluids .

Catalog #	Product Name	Size
M1201-01	MgPure blood gDNA kit	4x 96 preps
M1201-02	MgPure blood gDNA kit	20x 96 preps



Human Blood gDNA purified using MgPure 96 well Blood gDNA kit

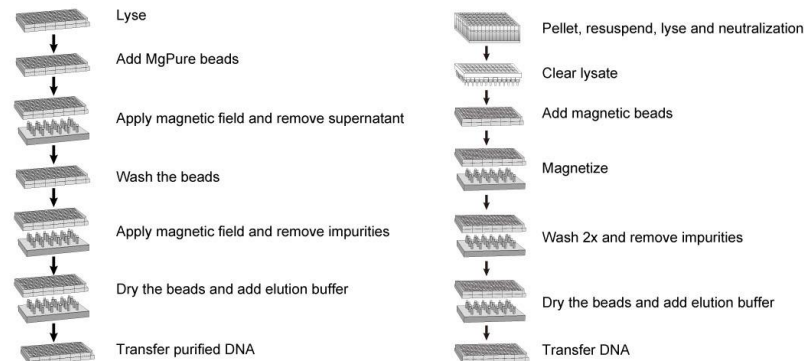


Fig 1: 96 well Blood gDNA Isolation kit

Fig 2: MgPure 96 well Plasmid Purification kit

MgPure 96 well plasmid DNA kit

- Purify 96 samples within 1 hour.
- Higher yield as compared to membrane/plate format
- Suitable for common robotic platforms
- Suitable for purification of low copy number plasmids, BACs, PACs and Cosmids.

Catalog #	Product Name	Size
M1812-01	MgPure Plasmid Purification Kit	4x 96 preps
M1812-02	MgPure Plasmid Purification Kit	20x 96 preps

Express Plasmid Miniprep Kit

Express Plasmid Miniprep

The express miniprep kit takes only 10 minutes compared to competitors 25 minutes.

- Fast: Developed a unique, patented lysate clearance column that is used to clear lysate in 20 seconds. instead of spinning for 10 min. No need to transfer clear lysate one by one.
- Higher purity: No carry over debris because the lysate is cleared by a column.
- Higher yield: No remaining lysate, almost 100% of the lysate is recovered.
- Eco-friendly: No Chaotropic salts used in the buffer system.
- Safe product: No chaotropic salts, safe for scientists.



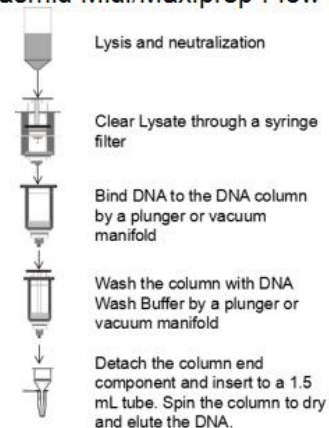
Catalog #	Product Name	Preps
PD1218-01	Express Plasmid Mini Kit	50
PD1218-02	Express Plasmid Mini Kit	250
PD1219-01	EndoFree Express Plasmid Mini Kit	50
PD1219-02	EndoFree Express Plasmid Mini Kit	250

Express Plasmid Midiprep Kit

25 Minutes Plasmid Midiprep/Maxiprep

- Up to 500 µg from 100 mL culture/1 mg from 200 mL culture.
- No high speed floor centrifuge required.
- Lysate clearance by syringe filter.
- DNA binding and washing by syringe plunger or vacuum manifold.
- High concentration DNA is eluted in 1.5 mL tube.

Express Plasmid Midi/Maxiprep Flow Chart

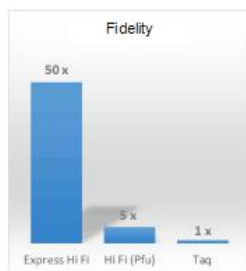
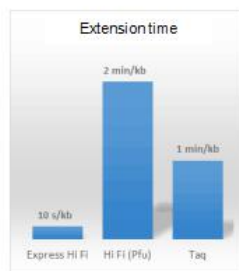
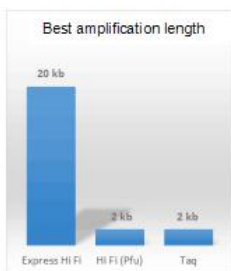


Catalog #	Product Name	Preps
PD1468-01	Express Plasmid Midiprep Kit	10
PD1468-02	Express Plasmid Midiprep Kit	25
PD1568-01	Express Plasmid Maxiprep Kit	10
PD1568-02	Express Plasmid Maxiprep Kit	25
PD2468-01	EndoFree Express Plasmid Midiprep Kit	10
PD2468-02	EndoFree Express Plasmid Midiprep Kit	25
PD2568-01	EndoFree Express Plasmid Maxiprep Kit	10
PD2568-02	EndoFree Express Plasmid Maxiprep Kit	25

Express Hi Fi DNA Polymerase

- Robust Reactions – Maximal success with minimal optimization.
- Extreme Fidelity – >50X greater than Taq.
- High Speed – Dramatically reduced extension times (10X faster than Hi Fi DNA Polymerase, 1kb/10 seconds).
- High Yield – Increased product yield using minimal amount of enzyme.
- Versatile – Can be used for routine PCR as well as long or difficult templates.

Catalog#	Product Name	Preps
EHF1101-01	Express Hi Fi DNA Polymerase	500 Units
EHF1101-02	Express Hi Fi DNA Polymerase	2500 Units



Hi Fi DNA Polymerase

- Extreme Fidelity – >5 X greater than Taq.

Catalog#	Product Name	Preps
HF1101-01	Hi Fi DNA Polymerase	500 Units
HF1101-02	Hi Fi DNA Polymerase	2500 Units

2X Express High-Fidelity PCR Master Mix

- All that is required is the addition of template and primers.
- Robust Reactions – Maximal success with minimal optimization.
- Extreme Fidelity – >50X greater than Taq.
- High Speed – Dramatically reduced extension times (10X faster than Hi Fi DNA Polymerase, 1kb/10 seconds).
- High Yield – Increased product yield using minimal amount of enzyme.
- Versatile – Can be used for routine PCR as well as long or difficult templates.

Catalog#	Product Name	Preps
EHF1102-01	2 × Express High-Fidelity PCR Master Mix	2.5 mL
EHF1102-02	2 × Express High-Fidelity PCR Master Mix	12.5 mL

2X Hi Fi DNA Polymerase PCR Mix

- All that is required is the addition of template and primers.
- Extreme Fidelity – >5 X greater than Taq.
- Simple – Avoid the multi-step operation bring pollution, and save time.

Catalog#	Product Name	Preps
HF1102-01	2 × High-Fidelity PCR Master Mix	2.5 mL
HF1102-02	2 × High-Fidelity PCR Master Mix	12.5 mL



Clear Brook, VA 22624

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