

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Саранск (8342)22-96-24
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97

Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

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Технические характеристики на наборы для подготовки библиотеки NGS, материалы для электрофореза и гибридизации нуклеиновых кислот, материалы для очистки нуклеиновых кислот КОМПАНИИ **Sigma-Aldrich**

Виды товаров: наборы для экстракции геномной ДНК, наборы для амплификации всего генома, наборы для амплификации всего транскриптома, наборы для подготовки библиотеки малых РНК, наборы для чистки библиотеки, оборудование и системы для гель-электрофореза нуклеиновых кислот, наборы для очистки ДНК, наборы для очистки ДНК с одним спином, наборы для ПЦР, наборы для минипрепаратов плазмид, наборы для подготовки плазмид, наборы для подготовки плазмид, не содержащих эндотоксинов, наборы минипрепаратов для пятиминутной подготовки плазмид, наборы для очистки с одним отжимом, наборы для очистки ПЦР, фильтровальные планшеты для очистки ПЦР, наборы для экстракции геля, наборы для извлечения ДНК из геля, колонки и планшеты для очистки реакций секвенирования, планшеты для очистки реакций секвенирования, наборы для очистки РНК и др.

NGS Library Preparation



Library preparation is the first step of next generation sequencing. Before DNA or RNA samples can be sequenced, nucleic acids must be isolated, fragmented, end-repaired, and covalently linked to adapters using ligation or tagmentation methods. The complexity of a well-prepared NGS library should fully and accurately reflect the complexity of the sample, but will also reflect any biases introduced during library preparation. A key goal in preparing a DNA or RNA library for next generation sequencing is to maximize complexity while reducing PCR or other amplification-introduced biases, as the quality of the resulting library can strongly impact NGS results.

We offer a portfolio of NGS library preparation tools designed to simplify workflows and facilitate the preparation of high quality DNA or RNA libraries that accurately represent sample complexity while reducing bias for whole genome sequencing (WGS), whole transcriptome analysis (WTA), total RNA sequencing, and miRNA and small RNA sequencing applications.

GENOMIC DNA EXTRACTION KITS

For DNA library preparation, high molecular weight genomic DNA (gDNA) needs to be extracted from cells, tissues, or other sample types. Purified genomic DNA should have minimal shearing and biological and chemical contaminants for optimal performance in subsequent amplification or sequencing reactions.

The Fire Monkey™/Fire Flower™ high molecular weight DNA extraction kit enables isolation of high purity genomic DNA with minimal shearing and low molecular weight nucleic acid contaminants.

- Fire Monkey™ is a standard spin-column process that extracts high molecular weight DNA with average strand lengths of >100kb from either bacterial or mammalian cells in 1 hour.
- Fire Flower™ is a standard spin-column process that can size select extracted DNA from any sample source within 15 minutes. Fire Flower™ can increase the overall average strand length by 30% while depleting DNA fragments up to 30kb.

WHOLE GENOME AMPLIFICATION KITS

DNA sequence analysis is often limited by small amounts of available sample or low extraction yield. When limited starting material is attainable, amplification techniques can be used to increase the amount of starting DNA. Whole genome amplification (WGA) can

be used to pre-amplify both intact and highly fragmented DNA samples for input into NGS workflows.

The SeqPlex-I WGA kit allows amplification of small quantities of DNA or degraded or highly fragmented DNA for direct input onto Illumina® next-generation sequencing (NGS) flow cells.

- Facilitates sequencing from as little as 100 pg of DNA
- Enhanced primers for complete genome coverage, minimal sequence bias, and amplicon size ideal for next generation sequencing (NGS)
- Cost-effective: No additional NGS library prep step
- Compatible with Illumina® next-generation sequencing

The SeqPlex Enhanced DNA Amplification Kit for whole genome amplification is designed to facilitate next-generation sequencing from extremely small quantities or from degraded/highly fragmented DNA. This kit has been developed to integrate into the Illumina®, SOLiD™, or 454 sequencing workflows.

- Random priming technology amplifies fragmented DNA such as ChIP or FFPE
- Facilitates sequencing from as little as 100 pg of ChIP DNA
- Enhanced primers for complete genome coverage, minimal sequence bias, and primer removal
- Compatible with Illumina®, SOLiD™, or 454 library prep for next generation sequencing

WHOLE-TRANSCRIPTOME-AMPLIFICATION-KITS

The main goal in preparing an NGS library for RNA-Seq is to maximize transcriptome library complexity to fully represent the starting pool of sequences while reducing bias. RNA-Seq for high-throughput gene expression profiling and transcriptome analysis is commonly challenged by low quantities of starting RNA. Whole transcriptome amplification (WTA) can be used to generate sufficient amounts of sequencing targets from small amounts of RNA but requires high-fidelity transcript replication without loss or distortion of specific mRNAs to reduce library bias.

The SeqPlex-I WTA kit allows amplification of small quantities of reverse transcribed RNA or degraded RNA for direct input onto Illumina® next-generation sequencing (NGS) flow cells.

- Amplifies fragmented or extremely small quantities of total RNA. Fragmented or intact RNA from all sources including FFPE and RIP are easily amplified using random priming technology.
- Semi-degenerate library primer design ensures more complete transcriptome coverage and efficient priming
- Fewer Steps: No need to fragment cDNA before sequencing
- High-efficiency: Amplifies ds-cDNA in 8 hours or less
- Cost-effective: No longer requires an additional NGS library prep step
- Compatible with Illumina® next generation sequencing

The SeqPlex RNA Amplification Kit for whole transcriptome amplification (WTA) is designed to facilitate next-generation sequencing (NGS) from small quantities or from degraded/highly fragmented RNA (e.g. RNA from formalin-fixed paraffin-embedded (FFPE) tissue samples). The SeqPlex kit allows the user to pre-amplify RNA samples for input into an NGS workflow.

- Random priming technology amplifies low quantities of fragmented or intact RNA from all sources including FFPE and RIP.
- Semi-degenerate library primer design for more complete transcriptome coverage and efficient priming.
- No need to fragment DNA before sequencing.
- Amplifies ds-cDNA in 8 hours or less.
- Compatible with all next generation sequencing platforms except Pacific Bioscience.

SMALL-RNA-LIBRARY-PREPARATION

NGS technologies have revolutionized the study of small RNAs including miRNA, siRNA, and piRNA that have been shown to play a vital role in post-translational regulation of gene expression. Small RNA sequencing has been an increasingly popular approach in small RNA discovery and profiling. However, small RNA library preparation methods can introduce significant bias, specifically during adapter ligation steps.

The RealSeq®-AC RNA library preparation kit offers a novel method for preparing miRNA and small-RNA sequencing libraries that reduces incorporation bias in NGS. By using a novel single adapter and circularization, RealSeq® greatly reduces library preparation bias. This technology solves the problem of commonly used sequencing library preparations that lead to underdetection of many miRNAs.

- Significantly reduces sequencing bias in small-RNA sequencing
- Accurately quantifies biologically relevant small RNAs
- Allows for more efficient discovery of novel small RNAs

LIBRARY CLEANUP

NGS library cleanup involves the removal of sequencing adaptors, PCR primers, dNTPs, enzymes, and buffer contaminants while enabling selection of nucleic acids that are in the correct size range for downstream sequencing. Library cleanup methods should maximize yield and recovery, minimize the presence of biological and chemical contaminants, and remove undesired nucleic acid fragment or library molecules in preparation for sequencing.

The HighPrep™ PCR Clean-up System is a paramagnetic bead-based post-PCR clean-up reagent designed for efficient purification of DNA fragments and for size-specific selection of amplicons. The purification consists of removal of salts, primers, primer-dimers, dNTPs, as DNA fragments are selectively bound to the magnetic bead particles. The magnetic beads are used for different library prep chemistries for NGS.

- High recovery of >100 bp amplicons
- Adaptable to high throughput liquid handling systems
- Stable recovery of amplicons > 100bp, predictable and consistent size selection
- No centrifugation or filtration leads to higher and purer yields

WTA2

Complete Whole Transcriptome Amplification Kit

DNA polymerase included, Complete Kit with optimized enzyme to amplify total RNA in <4 hours, no 3' bias



OLIGO

Custom DNA Oligos

Design and Order Custom Oligos



D7295

Deoxynucleofide Mix, 10 mM

Molecular Biology Reagent



AMPD1

DNase I

Amplification Grade



EC600

GenElute™-E Single Spin DNA Cleanup Kit



PCR9604

GenElute™ 96 Well PCR Clean-Up Kit

4 x 96 well plate, sufficient for 4 96-well plate purifications



NA1020

GenElute™ PCR Clean-Up Kit

sufficient for 70 purifications



WGA2

GenomePlex® Complete Whole Genome Amplification (WGA) Kit

Optimized kit with enzyme for amplifying a variety of DNA including FFPE tissue



WGA4

GenomePlex® Single Cell Whole Genome Amplification Kit

Amplify genome of a single cell



WGA3

GenomePlex® WGA Reamplification Kit

Reamplification of WGA product with minimal bias



WGA1

GenomePlex® Whole Genome Amplification (WGA) Kit

Kit for whole genome amplification from a variety of DNA sources including FFPE tissue



MBD0027

Genomics standardization kit from *Porphyromonas gingivalis*

Suitable for PCR, sequencing and NGS



MBD0006

Inactivated *Akkermansia muciniphila*

Suitable for DNA extraction, PCR, sequencing, next generation sequencing, >10⁸ bacteria/vial



MBD0021

Inactivated *Bacillus subtilis*

Suitable for PCR, sequencing and NGS, >10⁸ bacteria/ml



MBD0022

Inactivated *Burkholderia pyrocinia*

Suitable for DNA extraction, PCR, sequencing and NGS, >10⁸ bacteria/vial



MBD0011

Inactivated *Enterococcus faecalis*

Suitable for DNA extraction, PCR, sequencing, next generation sequencing, >10⁸ bacteria/ml



MBD0017

Inactivated *Escherichia coli*

Suitable for DNA extraction, PCR, sequencing, next generation sequencing, >10⁸ bacteria/ml



MBD0009

Inactivated *Porphyromonas gingivalis*

Suitable for DNA extraction, PCR, sequencing, next generation sequencing, >10⁸ bacteria/vial



MBD0007

Inactivated *Proteus mirabilis*

Suitable for DNA extraction, PCR, sequencing, next generation sequencing, >10⁸ bacteria/ml



MBD0008

Inactivated *Proteus vulgaris*

Suitable for DNA extraction, PCR, sequencing, next generation sequencing, >10⁸ bacteria/mL

MBD0016

Inactivated *Pseudomonas aeruginosa*

Suitable for DNA extraction, PCR, sequencing, next generation sequencing, >10⁸ bacteria/ml



MBD0010

Inactivated *Salmonella enterica*

Suitable for DNA extraction, PCR, sequencing, next generation sequencing, >10⁸ bacteria/ml



KMM-101NV

KOD One™ PCR Master Mix

Ready-to-use 2X hot-start PCR master mix with a modified KOD DNA polymerase optimized for ultra-fast and convenient high-fidelity PCR



KMM-201NV

KOD One™ PCR Master Mix -BLUE-

Ready-to-use 2X hot-start PCR master mix with a modified KOD DNA polymerase optimized for ultra-fast and convenient high-fidelity PCR



MBD0026

Microbial community DNA mix

Suitable for PCR, sequencing and NGS, 10 ng/μL



MBD0001

Microbial DNA standard from *Akkermansia muciniphila*

Suitable for PCR, sequencing and NGS, 10 ng/μL



MBD0018

Microbial DNA standard from *Bacillus subtilis*

Suitable for PCR, Sequencing and NGS, 10 ng/μL



MBD0019

Microbial DNA standard from *Burkholderia pyrrocinia*

Suitable for PCR, sequencing and NGS, 10 ng/μL



MBD0023

Microbial DNA standard from *Deinococcus radiodurans*

Suitable for PCR, sequencing and NGS, 10 ng/μL



MBD0012

Microbial DNA standard from *Enterococcus faecalis*

Suitable for PCR, sequencing and NGS, 10 ng/μL



MBD0013

Microbial DNA standard from *Escherichia coli*

Suitable for PCR, sequencing and NGS, 10 ng/μL



MBD0004

Microbial DNA standard from *Porphyromonas gingivalis*

Suitable for PCR, sequencing and NGS, 10 ng/μL



MBD0002

Microbial DNA standard from *Proteus mirabilis*

Suitable for PCR, sequencing and NGS



MBD0003

Microbial DNA standard from *Proteus vulgaris*

Suitable for PCR, sequencing and NGS



MBD0014

Microbial DNA standard from *Pseudomonas Aeruginosa*

Suitable for PCR, sequencing and NGS, ≥ 10 ng/ μ L



MBD0005

Microbial DNA standard from *Salmonella enterica*

Suitable for PCR, sequencing and NGS, 10 ng/ μ L



MBD0024

Microbial DNA standard from *Thermobifida fusca*

Suitable for PCR, sequencing and NGS, 10 ng/ μ L



SEQXE

SeqPlex DNA Amplification Kit

For use with high throughput sequencing technologies, Whole Genome Amplification kit designed to facilitate Next Gen Sequencing.



SEQR

SeqPlex RNA Amplification Kit

For use with high throughput sequencing technologies



SEQXI

SEQPLEX-I WGA Kit

Whole Genome Amplification, DNA Amplification

SEQRI

SEQPLEX-I WTA Kit

Whole Transcriptome Amplification, RNA Amplification



WTA1

TransPlex® Whole Transcriptome Amplification Kit

DNA polymerase separate.



MBD0025

Water

Microbial DNA-free; Suitable for PCR, sequencing and NGS



W4502

Water

Nuclease-Free Water, for Molecular Biology

Nucleic Acid Gel Electrophoresis Equipment and Systems

Whether you need to clone a gene, detect a specific nucleic acid sequence, or quantify DNA or RNA, you need a complete set of genomic analysis tools that work together. We offer an extensive collection of high-quality reagents and chemicals for DNA and RNA gel electrophoresis and blotting including DNA and RNA ladders, sample loading buffers, precast agarose gels, nucleic acid stains, nylon transfer membranes, hybridization solutions, and Northern and Southern blotting reagents and consumables.

What is gel electrophoresis used for? Gel electrophoresis is often used for separating molecules, such as protein, DNA, and RNA, by their size. Enhance your nucleic acid gel electrophoresis workflow with our DirectLoad™ Mini and Midi Horizontal Electrophoresis Systems. Buffers, ladders, loading dyes, and stains complement a compellingly economical solution for agarose gel electrophoresis. Featuring unprecedented sample throughput and experimental versatility, explore the full list of offerings within the DirectLoad™ lineup of products and optimize your nucleic acid research.

DIRECTLOAD™ MINI AND MIDI HORIZONTAL ELECTROPHORESIS SYSTEM FEATURES



All DirectLoad™ Mini and Midi Horizontal Electrophoresis Systems come with an array of accessories, while clear signage on each tank guides proper assembly for your experimental needs. Each system comes with the required components for assembly, and electrode cables are compatible with available mPAGE® Power Supplies. Each accessory is also available for sale separately, increasing the longevity of each system with cost-friendly replacement parts. Additional DirectLoad™ Mini and Midi Horizontal Electrophoresis System features include the following:

- Easy-click, color-coded attachments for safe, single-orientation assembly.
- The DirectLoad™ Lid disconnects the power source upon removal for user safety.
- DirectLoad™ Gel Trays and Gel Dams utilize a leak-proof design, allowing preparation of agarose gels in parallel.
- Multiple gel tray and comb size combinations maximize experimental versatility.
- DirectLoad™ Combs are height-adjustable and can be utilized as sample loading guides using single and multi-channel pipettes.
- Replacement accessories are available to extend the longevity of the system.

D0428

1 kb DNA Ladder

for DNA electrophoresis



705373

1,7-Dimethylxanthine-(dimethyl-d₆)

≥98 atom % D, ≥97% (CP)



D5042

123 bp DNA Ladder

for DNA electrophoresis



S7025

50 bp DNA Step Ladder

for DNA electrophoresis



D3937

DirectLoad™ 1 kb DNA Ladder

ready-to-use marker for DNA electrophoresis



D3812

DirectLoad™ 50 bp DNA Step Ladder

ready-to-use marker for DNA electrophoresis



D3687

DirectLoad™ PCR 100 bp Low Ladder

ready-to-use marker for DNA electrophoresis



D7058

DirectLoad™ Wide Range DNA Marker

ready-to-use marker for DNA electrophoresis



1.11608

Ethidium bromide

(1% solution in water) for electrophoresis



1.02243

Ethidium bromide adsorber

for decontamination of ethidium bromide from staining solutions



D9281

Lambda DNA EcoR I Hind III Digest

for DNA electrophoresis



D9780

Lambda DNA *Hind* III Digest

for DNA electrophoresis



D2916

Lambda DNA Mixed Digest

for DNA electrophoresis



705403

Nitrosobenzene-¹³C₆

99 atom % ¹³C, 98% (CP)



D9655

pBR322 *Hae* III Digest

for DNA electrophoresis



P1473

PCR 100 bp Low Ladder

for electrophoresis of PCR fragments



P1598

PCR 20 bp Low Ladder

for electrophoresis of PCR fragments



P9577

PCR 50 - 2,000 bp Marker

for electrophoresis of PCR fragments



D6293

pUC18 DNA *Hae* III Digest

for DNA electrophoresis



D0672

φX174 DNA Marker *Hae* III Digest

for DNA electrophoresis

R7020

Transcript RNA Markers 0.2-10 kb

for RNA electrophoresis



R7644

Transcript RNA Markers 0.28-6.6 kb

for RNA electrophoresis

gDNA Purification



DNA purification kits are used to extract and isolate DNA from samples, removing biological and chemical impurities such as cell debris, serum, proteins, lipids, and ionic components. DNA purification kits are also used to clean and prepare DNA samples for use in various downstream applications including cloning, gene editing, *in situ* hybridization, PCR, qPCR, multiplex PCR, sequencing, and next generation sequencing (NGS).

Read more about

- **GenElute™ DNA Purification Kits**
- **GenElute™-E Single Spin DNA Purification Kits**
- **Extract-N-Amp™ PCR Kits**

GENELUTE™ DNA PURIFICATION KITS

Classic GenElute™ DNA purification kits use a silica resin to strongly bind DNA under high salt conditions, allowing proteins, small RNAs, and other molecules to be removed through wash steps using a salt/ethanol solution. After washing, purified DNA is eluted in water or TE buffer. A broad portfolio of GenElute™ DNA purification kits tailored to specific sample types are available, enabling purification of genomic DNA (gDNA) from cell culture, mammalian tissue, blood, bacteria, viruses, plant tissue, soil, water, urine, and stool. GenElute™ Cell-Free DNA Kits provide rapid and efficient purification of circulating free DNA (cfDNA) to recover cell-free DNA fragments in the range of 100 bp – 500 bp, suitable for a wide range of downstream applications including next-generation sequencing, qPCR and bisulfite sequencing.

Features:

- Silica-based DNA purification method
- High yield, high purity DNA at lowest cost per prep
- Most common technique used for DNA purification in laboratory workflows
- ~90-minute protocol (varies based on lysis time)
- Comprehensive portfolio of kits tailored for specific sample types
- Vacuum and spin formats
- Multi-analyte (dual RNA/DNA copurification kits) available

GENELUTE™-E SINGLE SPIN DNA PURIFICATION KITS

GenElute™-E DNA purification kits use a negative chromatography technique dependent on size exclusion to isolate and purify nucleic acid in a single spin. In size exclusion

chromatography, molecules are separated by size. Smaller molecules such as proteins, lipids, and ionic components become trapped in the pores of the stationary phase of the column. Larger DNA molecules flow through the column quickly because they are too large to enter the pores. By exploiting this difference in size, GenElute™-E purification kits enable DNA purification in a single spin without the need for multiple binding and wash steps.

Features:

- Negative chromatography DNA purification method based on size exclusion
- Simplified workflow
- Quick protocol (3 minutes hands-on time, for a total of 15-45 minutes depending on lysis time)
- Fewer chemical impurities, with no chaotropic salts or alcohol wash solutions that can inhibit downstream processes such as PCR
- Fewer biological impurities, with less shearing of genomic DNA due to reduced number of spin steps
- Reduced plastic waste and no hazardous binding or wash buffers
- Eco-friendly packaging
- Easy-to-follow protocols and checklists
- Portfolio of kits tailored for genomic DNA purification, PCR cleanup, and gel extraction

EXTRACT-N-AMP™ PCR KITS

Extract-N-Amp™ PCR kits are the first integrated DNA extraction and amplification kits for blood, tissue, and plant samples. These innovative kits provide all the reagents necessary to rapidly release DNA and amplify targets of interest by PCR. A novel extraction method eliminates the need for long enzymatic digestions or homogenization. Kits also include a specially formulated hot start PCR ReadyMix™ for amplification directly from the extract.

Features:

- Integrated purification and amplification
- Simplified sample processing
- Kits include all reagents, proprietary buffers, and enzymes needed to rapidly extract and amplify targets of interest from a variety of cells and tissues
- REExtract-N-Amp™ PCR ReadyMix™ contains an inert dye that acts as a tracking dye and allows for convenient loading of PCR reaction onto agarose gels for analysis

R4775

REExtract-N-Amp™ PCR ReadyMix™

Ready-to-use 2X PCR Master Mix with Loading Dye



XNAT

REExtract-N-Amp™ Tissue PCR Kit

sufficient for 10 reactions, sufficient for 100 reactions, sufficient for 1000 reactions, hotstart, dNTPs included



NA2110

GenElute™ Bacterial Genomic DNA Kits

sufficient for 70 purifications



XNAT2

Extract-N-Amp™ Tissue PCR Kit

sufficient for 100 extractions, sufficient for 100 amplifications



E3004

Extract-N-Amp™ PCR ReadyMix™

Amplifications to support Extract-N-Amp Plant and Extract-N-Amp Tissue



NA2100

GenElute™ Bacterial Genomic DNA Kits

sufficient for 10 purifications



NA2120

GenElute™ Bacterial Genomic DNA Kits

sufficient for 350 purifications



NA2010

GenElute™ Blood Genomic DNA Kit

sufficient for 70 purifications



XNAP2

Extract-N-Amp™ Plant PCR Kit

sufficient for 100 extractions, sufficient for 100 amplifications



XNAT2R

Extract-N-Amp™ Tissue PCR Kit

sufficient for 1000 extractions, sufficient for 1000 amplifications



XNAP

REExtract-N-Amp™ Plant PCR Kit

sufficient for 100 extractions, sufficient for 100 amplifications



XNAPR

REExtract-N-Amp™ Plant PCR Kit

sufficient for 1000 extractions, sufficient for 1000 amplifications



XNAB2

Extract-N-Amp™ Blood PCR Kit

sufficient for 100 extractions, sufficient for 100 amplifications



XNAR

Extract-N-Amp™ Plant PCR Kit

sufficient for 1000 extractions, sufficient for 1000 amplifications



S4320

SYBR® Green Extract-N-Amp™ PCR ReadyMix™

Amplifications to support Extract-N-Amp Plant and Extract-N-Amp Tissue



EC100

GenElute™-E Single Spin Blood DNA Kit



XNATG

SYBR® Green Extract-N-Amp™ Tissue PCR Kit

sufficient for 100 extractions, sufficient for 100 amplifications



NA2020

GenElute™ Blood Genomic DNA Kit

sufficient for 350 purifications



XNAB2R

Extract-N-Amp™ Blood PCR Kit

sufficient for 1000 extractions, sufficient for 1000 amplifications



EC300

GenElute™-E Single Spin Tissue DNA Kit

EC400

GenElute™-E Single Spin Cell Culture DNA Kit



XNAPS

REExtract-N-Amp™ Plant PCR Kit

sufficient for 10 extractions, sufficient for 10 amplifications



XNAPE

REExtract-N-Amp™ Plant PCR Kit

sufficient for 100 extractions, sufficient for 500 amplifications



XNAP2E

Extract-N-Amp™ Plant PCR Kit

sufficient for 100 extractions, sufficient for 500 amplifications



EC500

GenElute™-E Single Spin Plant DNA Kit



XNATRG

SYBR® Green Extract-N-Amp™ Tissue PCR Kit

sufficient for 1000 extractions, sufficient for 1000 amplifications



EC200

GenElute™-E Single Spin Blood DNA High Yield Kit



XNAPG

SYBR® Green Extract-N-Amp™ Plant PCR Kit

sufficient for 100 preparations



P8115

Extract-N-Amp™ PCR ReadyMix™ for Blood

12 mL sufficient for 1000 amplifications



EC196

GenElute™-E Single Spin Blood DNA 96 Kit



XNAB

REExtract-N-Amp™ Blood PCR Kit

sufficient for 100 extractions, sufficient for 100 amplifications



XNAS2

Extract-N-Amp™ Seed PCR Kit

sufficient for 100 extractions, sufficient for 100 amplifications



P8240

REExtract-N-Amp™ PCR ReadyMix™ for Blood

12 mL sufficient for 1000 amplifications



EC396

GenElute™-E Single Spin Tissue DNA 96 Kit



XNASS

REExtract-N-Amp™ Seed PCR Kit

sufficient for 10 extractions, sufficient for 10 amplifications



XNABS

REExtract-N-Amp™ Blood PCR Kit

sufficient for 10 extractions, sufficient for 10 amplifications



EC596

GenElute™-E Single Spin Plant DNA 96 Kit



XNAS

REExtract-N-Amp™ Seed PCR Kit

sufficient for 100 extractions, sufficient for 100 amplifications



XNABR

REExtract-N-Amp™ Blood PCR Kit

sufficient for 1000 extractions, sufficient for 1000 amplifications

Plasmid DNA Purification



Plasmid purification is commonly used for molecular cloning, transformation, and recombinant protein expression. Plasmid purification kits are available based on size of the bacterial culture and corresponding plasmid yield (miniprep, midiprep, maxiprep, megaprep, and gigaprep).

Our plasmid kits provide reliable isolation of high quality plasmid DNA. These kits are:

- Designed with advanced silica bind and elute technology
- Compatible with both vacuum and spin format
- Formulated without phenol/chloroform

These products allow researchers to maximize the reproducibility of their workflow and minimize their time spent on obtaining plasmid DNA for transfection, sequencing, PCR, and other downstream applications.

GENELUTE™ PLASMID MINIPREP KITS

GenElute™ plasmid miniprep kits offer simple, rapid, and cost-effective methods for isolating plasmid DNA from *E. coli* cultures. These kits combine silica-based membrane technology and the convenience of a spin column format.

Features:

- 40% more preps per kit than the leading supplier
- Purify up to 20 µg of plasmid DNA per mL of culture
- Purified plasmid DNA in less than 30 minutes for up to 24 preps
- No phenol/chloroform extraction or alcohol precipitation required

GENELUTE™ HP PLASMID PREP KITS

GenElute™ HP plasmid purification kits yield high quality plasmid DNA in less than 30 minutes for Mini, Midi, and Maxiprep kits, or 1.5 hours for Mega and Gigaprep kits.

- From harvested bacterial culture to pure plasmid DNA in less time
- Up to 25 µg (Mini), 350 µg (Midi), 1.2 mg (Maxi), 5 mg (Mega), and 15 mg (Giga) yield of high-copy plasmid DNA

- Offers the flexibility of a vacuum or spin format (Mega and Gigaprep in vacuum format only)
- No phenol/chloroform extraction or alcohol precipitation required
- Kits are stable at room temperature for convenient storage

GENOPURE™ PLASMID PREP KITS

Roche Genopure™ midi and maxi prep kits use anion exchange chromatography for plasmid purification. A modified alkaline lysis protocol optimized for cell cultures grown in LB media is used to isolate DNA. The lysate can be filtered rather than centrifuged prior to anion exchange, resulting in shorter plasmid prep times and complete removal of SDS from the purified product.

- Reduce DNA shearing by clarifying lysate using pre-folded filters rather than centrifugation prior to anion exchange.
- Save time with ready-to-use reagents (10 minutes hands-on-time/75 minutes overall).
- Purify all sizes and types of plasmid, even BAC DNA.
- Process multiple samples in parallel using high speed gravity-flow columns.
- Eliminate the use of hazardous organic compounds such as cesium chloride, phenol, chloroform, and ethidium bromide.

GENELUTE™ ENDOTOXIN-FREE PLASMID PREP KITS

Endotoxins reduce cell viability and transfection efficiencies among different eukaryotic cell lines and can influence the outcome and reproducibility of a given transfection experiment when using mammalian and other eukaryotic cells. GenElute™ endotoxin-free plasmid prep kits offer a simple, rapid, cost-effective method for purifying plasmid DNA with <0.1

EU/mg DNA for high-efficiency transfection.

- Higher transfection efficiency and yield than market leaders
- Purify endotoxin-free plasmid DNA (≤ 0.1 EU/mg DNA)

GENELUTE™ FIVE-MINUTE PLASMID MINIPREP KITS

GenElute™ five-minute miniprep kits feature a streamlined protocol yielding up to 5 mg high-quality plasmid DNA in about five minutes.

- Only 5 minutes from start to finish
- No pelleting cells or clearing lysates
- Binding column works with any standard laboratory vacuum manifold
- Choose vacuum or spin protocols

PLEX15

GenElute™ Endotoxin-free Plasmid Maxiprep Kit

sufficient for 15 purifications



PLED35

GenElute™ Endotoxin-free Plasmid Midiprep Kit

sufficient for 35 purifications



NA9604

GenElute™ HP 96-Well Plasmid Miniprep Kit

sufficient for 4 96-well plate purifications



NA0400S

GenElute™ HP Endotoxin-Free Plasmid Maxiprep Kit

sufficient for 4 preparations



NA0400

GenElute™ HP Endotoxin-Free Plasmid Maxiprep Kit

sufficient for 10 preparations



NA0410

GenElute™ HP Endotoxin-Free Plasmid Maxiprep Kit

sufficient for 25 preparations



NA0600

GenElute™ HP Endotoxin-Free Plasmid Megaprep Kit

1 kit sufficient for 5 preparations



NA0300S

GenElute™ HP Plasmid Maxiprep Kit

sufficient for 4 purifications



NA0300

GenElute™ HP Plasmid Maxiprep Kit

sufficient for 10 purifications



NA0310

GenElute™ HP Plasmid Maxiprep Kit

sufficient for 25 purifications



NA0200

GenElute™ HP Plasmid Midiprep Kit

sufficient for 25 purifications



NA0150

GenElute™ HP Plasmid Miniprep Kit

sufficient for 70 preparations



NA0160

GenElute™ HP Plasmid Miniprep Kit

sufficient for 350 preparations



NA0800

GenElute™ HP Select Plasmid Gigaprep Kit

sufficient for 5 preparations



PLX15

GenElute™ Plasmid Maxiprep Kit

sufficient for 15 purifications



PLD35

GenElute™ Plasmid Midiprep Kit

sufficient for 35 purifications



PLN350

GenElute™ Plasmid Miniprep Kit

sufficient for 350 purifications



PLN70

GenElute™ Plasmid Miniprep Kit

sufficient for 70 purifications



NA0100

PhasePrep™ BAC DNA Kit

Scalable method for isolating large-molecular weight plasmids

Reaction Clean-Up



Cleanup of PCR reactions, restriction digests, sequencing reactions, and agarose and polyacrylamide gel extracts is essential for removing contaminants such as salts, enzymes, unincorporated dNTPs, primers, ethidium bromide, and other impurities that can interfere with downstream analysis. A selection of products for cleaning up DNA and RNA from enzymatic reactions or pre-purified samples is available for flexibility and convenience.

GENELUTE™-E CLEAN-UP KITS

GenElute™-E DNA purification kits use a negative chromatography technique dependent on size exclusion to isolate and purify nucleic acid in a single spin.

- Simplified workflow
- Reduced plastic waste and no hazardous binding or wash buffers
- Eco-friendly packaging
- Portfolio includes both DNA and RNA cleanup kits

GENELUTE™ PCR CLEAN-UP KITS

- The GenElute™ PCR Clean-Up Kit is designed for rapid purification of single-stranded or double-stranded PCR amplification products. This kit removes 99% of primers and other components to purify up to 100 μ L or 10 μ g of PCR amplified DNA in 8 minutes, with recoveries up to 95%.
- The GenElute™ 96 Well PCR Clean-Up Kit allows for high throughput purification of PCR products by vacuum or centrifugation. This kit includes the necessary reagents for purification of highly pure PCR products. DNA recovery is 75-90% for fragments of 100 to 10,000 bp with removal of primers, primer-dimers, nucleotides, salts, and polymerase.

MULTISCREEN® PCR CLEANUP FILTER PLATES

Multiscreen® PCR filter plates offer fast, automatable solutions for high-throughput PCR purification, providing high purity and high recovery.

- >99.5% primer removal
- MultiScreen® PCR₉₆ filter plates for 150–300 μ L volume samples
- MultiScreen® PCR₃₈₄ filter plates for 20–100 μ L sample volumes

- MultiScreen® PCR_{μ96} microwell filter plate recommended for small fragments (1 – 150 bp) and smaller volumes (20 – 150 μL)

GENELUTE™ GEL EXTRACTION KIT

The GenElute™ Gel Extraction Kit is designed for the rapid purification of linear and plasmid DNA fragments from standard or low-melting agarose gels. This kit can also be used to purify DNA from polyacrylamide gels.

- Binds up to 10 μg of DNA
- Recoveries up to 80%
- Up to 3.5 g of agarose can be processed per column
- Compatible with both standard and low-melting agarose in TAE or TBE buffer

MONTAGE DNA GEL EXTRACTION KIT

The Montage DNA Gel Extraction Kit is a fast, effective solution for fully functional DNA recovery from agarose gel slices. In one 10-minute spin, the agarose gel containing the DNA of interest is fragmented and compressed to extrude the DNA ready for sequencing or cloning.

- Maximizes DNA recovery from agarose gel slices
- One 10-minute spin recovers fully functional DNA
- Purified DNA is ready for cloning or sequencing

SIGMASPIN® SEQUENCING REACTION CLEANUP COLUMNS AND PLATES

- SigmaSpin® Post-Reaction Clean-Up columns are ideal for lower throughput applications and provide a fast, simple, and highly efficient method for removing unincorporated dyes, excess salts, and other interfering reaction components.
- SigmaSpin™ 96-Well Post-Reaction Clean-Up plates provide a fast, simple, and highly efficient method for removing unincorporated dyes, excess salts, and other interfering reaction components.

MONTAGE AND MULTISCREEN® SEQUENCING REACTION CLEANUP PLATES

Montage and MultiScreen® Sequencing Reaction Cleanup products incorporate a patented size-exclusion membrane to yield highly purified sequencing reaction products. Available in 96- and 384-well formats, the plates follow a vacuum-driven protocol, and are automation compatible.

- 10-minute vacuum-based protocol
- Compatible with a variety of templates
- Optimized for use with BigDye™ chemistries

NA1020

GenElute™ PCR Clean-Up Kit

sufficient for 70 purifications



NA1111

GenElute™ Gel Extraction Kit

sufficient for 70 purifications



PCR9604

GenElute™ 96 Well PCR Clean-Up Kit

4 x 96 well plate, sufficient for 4 96-well plate purifications



EC800

GenElute™-E Single Spin RNA Cleanup Kit



EC600

GenElute™-E Single Spin DNA Cleanup Kit



EC700

GenElute™-E Organic Solvent DNA Cleanup Kit

RNA Purification



RNA purification is a critical first step in many analyses due to the easy degradability of RNA. GenElute™ RNA purification kits enable purification of RNA from a variety of sources quickly and efficiently with minimal degradation, maximum purity, and high recovery and yield. GenElute™-E Single Spin RNA purification kits can be used to clean up RNA preps in a single spin for PCR and downstream applications.

GENELUTE™ RNA PURIFICATION KITS

Classic GenElute™ RNA purification kits use silica or silicon carbide to strongly bind RNA, allowing proteins and other biological contaminants to be removed through wash steps. mRNA purification kits use oligo dT30 covalently linked to polystyrene beads to capture polyadenylated mRNA by hybridization. After washing, purified RNA is eluted. A broad portfolio of GenElute™ purification kits tailored to specific sample types are available, enabling purification of total RNA and mRNA from cells, tissues, serum, plasma, bacteria, viruses, and plant tissue.

Features:

- High yield, high purity RNA with minimal degradation
- Comprehensive portfolio of kits optimized for purification of total RNA or mRNA from a variety of sample types
- Offered in a variety of sizes and formats, from miniprep, midiprep, and maxiprep kits to high-throughput 96-well kits
- Includes kits for RNA/DNA co-purification
- Vacuum and spin formats

GENELUTE™-E SINGLE SPIN RNA PURIFICATION KITS

GenElute™-E RNA purification kits use a negative chromatography technique dependent on size exclusion to isolate and purify nucleic acid in a single spin. Smaller molecules such as proteins become trapped in the pores of the stationary phase of the column. Larger RNA molecules flow through the column quickly because they are too large to enter the pores. By exploiting this difference in size, GenElute™-E purification kits enable RNA purification in a single spin without the need for multiple binding and wash steps.

Features:

- Negative chromatography RNA purification method based on size exclusion
- Simplified workflow
- Quick protocol (3 minutes hands-on time, for a total of 15 minutes prep time)
- Fewer chemical impurities, with no chaotropic salts or alcohol wash solutions that can inhibit downstream processes such as PCR
- Reduced plastic waste and no hazardous binding or wash buffers

- Kits tailored for RNA cleanup

RNA PURIFICATION ESSENTIALS

A variety of reagents are available to protect RNA from degradation. Stabilyser™ reagent is a proprietary formulation of detergents and solutes optimized for efficient extraction, stabilization, and storage of protein, DNA, and RNA from tissue samples. RNaseZAP™ reagent is a cleaning agent for removing RNase from glassware, plastic surfaces, countertops, and pipettors. RNAlater® reagent is an aqueous, non-toxic tissue storage reagent that rapidly permeates tissue to stabilize and protect cellular RNA through RNase inactivation. RNastable® reagent is used to coat the bottom of storage tubes or wells, protecting picogram to microgram amounts of RNA at room temperature.

R2020

RNaseZAP™

Cleaning agent for removing RNase



RTN70

GenElute™ Mammalian Total RNA Miniprep Kit

sufficient for 70 purifications



RTN350

GenElute™ Mammalian Total RNA Miniprep Kit

sufficient for 350 purifications



SNC50

mirPremier® microRNA Isolation Kit

1 sufficient for 50 preparations



RTN9604

GenElute™ 96 Well Total RNA Purification Kit

4 x 96 well plate, sufficient for 4 96-well plate purifications



RTN10

GenElute™ Mammalian Total RNA Miniprep Kit

sufficient for 10 purifications



DMN10

GenElute™ Direct mRNA Miniprep Kits

sufficient for 10 purifications



EC800

GenElute™-E Single Spin RNA Cleanup Kit



DMN70

GenElute™ Direct mRNA Miniprep Kits

sufficient for 70 purifications



SNC10

mirPremier® microRNA Isolation Kit

1 sufficient for 10 preparations

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Астрахань (8512)99-46-04
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