

DNA EXTRACTION

PLASMID EXTRACTION

FRAGMENT DNA EXTRACTION

GENOMIC DNA EXTRACTION

RNA EXTRACTION

VIRAL ACID NUCLEIC EXTRACTION

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Plasmid Extraction **K**

ATP™ Plasmid Mini Kit

Description

ATP™ Plasmid Mini Kit is designed for the rapid, easily-handling, and cost-effective isolation of plasmid or cosmid DNA from 1~4 ml of bacterial cultures. This procedure uses a modified method of alkaline lysis and RNase treatment for creating cleared cell lysate with minimal genomic DNA and RNA contaminants. Subsequently, the lysate is neutralized and adjusted to high-salt binding conditions adaptable to the adsorption of DNA in one step. In the presence of a chaotropic salt, the plasmid DNA in the lysate binds to the uniquely designed glass-fiber matrix in the spin column. Whereas RNA, cellular proteins, and other unwanted impurities flow through the column and are easily and efficiently removed from reaction mixture. After a brief Washing Step with ethanol-contained Wash Buffer to remove endonucleases, salts and other contaminants, the purified plasmid DNA is eluted by low-salt Elution Buffer or water. The entire procedure can be completed in 20 minutes and the purified plasmid DNA is immediately ready for restriction digestion, ligation, PCR, and sequencing. The procedure does not require DNA phenol extraction and alcohol precipitation.

Quick View

Format: Spin columns

Sample: 1~4 ml bacterial cultures Operation: Centrifuge / vacuum manifold

Operation time: 20 minutes

Binding capacity: Up to 30 µg per Column

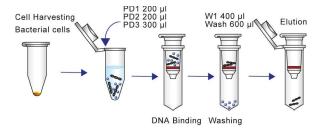
Expected yield: 25~35 µg for high-copy plasmid;5~15 µg per

low-copy plasmid

Application: DNA Library Screening and Analysis; DNA sequencing; Transformation; PCR; Restriction Digestion

Cat Nº

| ATP™ Plasmid | 100/300 prep | TR-BA1-0001 |
|--------------|--------------|-------------|
| Mini Kit | | TR-BA1-0002 |
| ATP™ Plasmid | 50 pc | TR-BA1-0008 |
| Mini Binding | | |
| Column | | |



ATP™ Plasmid Midi Kit

Description

ATP™ Plasmid Midi Kits use pre-packed resin of anion-exchange column to purify plasmid or cosmid DNA from 20~200 ml bacterial cultures. In the process, the modified method of alkaline lysis and RNase treatment are used for creating cleared cell lysate with minimal genomic DNA and RNA contaminants. By a gravity-flow procedure, the plasmid DNA in crude lysate binds to the anionexchange resin in the appropriate salt and pH conditions. Whereas RNA, cellular proteins, and other unwanted impurities flow through the column and are easily and efficiently removed from reaction mixture. After a brief washing step to wash off contaminants, the purified plasmid DNA is eluted by high-salt buffer and then precipitated by isopropanol for desalting. The entire procedure can be completed in 120 minutes without ultracentrifuges, HPLC or other toxic reagents.

Quick View

Sample: 20~50 ml of bacterial culture for high-copy number

plasmid

100~200 ml of bacterial culture for low-copy number plasmid

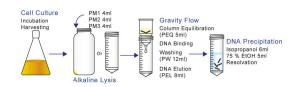
Operation: Gravity-flow Operation time: 120 minutes Yield: Up to 200 µg of plamsid

Application: Transfection; Microinjection; Sequencing; Restriction

Enzyme Digestion; Transcription

CAT Nº

| ATP™ Plasmid | 25 prep | TR-BA1-0003 |
|-------------------|---------|-------------|
| Midi Kit | | |
| ATP™ Plasmid Midi | 10 pc | TR-BA1-0009 |
| Resin Column | | |



K Fragment DNA Extraction

ATP™ Plasmid Maxi Kit

Description

ATPTM Plasmid Maxi Kits use pre-packed resin of anion-exchange column to purify plasmid or cosmid DNA from 100~400 ml bacterial cultures. In the process, the modified method of alkaline lysis and RNase treatment are used for creating cleared cell lysate with minimal genomic DNA and RNA contaminants. By a gravity-flow procedure, the plasmid DNA in crude lysate binds to the anionexchange resin in the appropriate salt and pH conditions. Whereas RNA, cellular proteins, and other unwanted impurities flow through the column and are easily and efficiently removed from reaction mixture. After a brief washing step to wash off contaminants, the purified plasmid DNA is eluted by high-salt buffer and then precipitated by isopropanol for desalting. The entire procedure can be completed in 120 minutes without ultracentrifuges, HPLC or other toxic reagents.

Quick View

Sample: 100~200 ml of bacterial culture for high-copy number

plasmid

250~400 ml of bacterial culture for low-copy number plasmid

Operation: Gravity-flow Operation time: 120 minutes Yield: Up to 500µg of plamsid

Application: Transfection; Microinjection; Sequencing; Restriction

Enzyme Digestion; Transcription

Cat Nº

| ATP™ Plasmid | 10/25 prep | TR-BA1-0004 |
|--------------|------------|-------------|
| Maxi Kit | | TR-BA1-0005 |
| ATP™ Plasmid | 10 pc | TR-BA1-0010 |
| Maxi Resin | | |
| Column | | |



ATP™ Gel/PCR Fragment DNA Extraction Kit

Description

ATPTM Gel/PCR Fragment DNA Extraction Kit is designed to recover or concentrate DNA fragments (50 bp-10 kb) from agarose gel, PCR or other enzymatic reaction. The method uses a chaotropic salt, guanidine thiocyanante, to dissolve the agarose gel and denature enzymes. The DNA fragments in the chaotropic salt are then bound to the uniquely designed matrix of glass-fiber in the spin column in the optimized salt concentration and pH provided by our buffer. Whereas unwanted impurities, such as salts, enzymes, primers unincorporated nucleotides, dyes, and ethidium bromide flow through the column and are easily and efficiently removed from reaction mixture. After washing step, the purified DNA fragments are eluted by low-salt Elution Buffer or water. The entire procedure does not require DNA phenol extraction and alcohol precipitation, and could be completed in 20 minutes.

Quick View

Format: Spin column

Sample: Up to 300 mg agarose gel slice: Up to 100 µl PCR

product or other enzymatic reaction Operation: Centrifuge / vacuum manifold

DNA size: 50 bp ~ 10 kb Operation time: 20 minutes for gel

extraction: 15 minutes for PCR clean up

Expected recovery: 75-85 % for gel extraction: 80-90 % for PCR

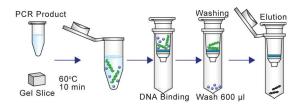
lean up

Application: DNA Sequencing; Ligation; PCR; Restriction Enzyme

Digestion; DNA Labeling

Cat No

| ATP™ Gel/PCR DNA | 100/300 | TR-BA1-0011 |
|---------------------|---------|-------------|
| Fragment Extraction | prep | TR-BA1-0012 |
| Kitt | | |
| ATP™ Fragment DNA | 50 pc | TR-BA1-0017 |
| Binding Column | | |



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Genomic DNA Extraction **K**

ATP™ Genomic DNA Mini Kit (Blood/Culture Cell/Bacteria)

Description

ATPTM Genomic DNA Mini Kit (Blood/Cultured Cell/Bacteria) provide a fast and economical method for purification of total DNA (including genomic, mitochondrial and viral DNA) from whole blood, plasma, serum, buffy coat, other body fluids, lymphocytes, bacterial and cultured cells. In this procedure, RBC Lysis Buffer is used to remove non-nucleated red blood cells and reduce hemoglobin contamination. The method use a chaotropic salt, guanidine hydrochloride, to lyse cells and degrade protein, than DNA in chaotropic salt is bond to glass-fiber matrix of column. After washing off the contaminants, the purified genomic DNA is eluted by low-salt Elution Buffer or water. The entire procedure can be completed in 40 minutes without phenol/chloroform extraction and alcohol precipitation. Average yield are 6 μg of DNA from 200 μl of human whole blood and up to 50 μg of DNA from 200 μl of buffy coat, 5 x 106 lymphocyte cells, or cultured cells. Purified DNA with

approximate 20-30 kb is suitable for PCR or ther enzyme reaction.

Quick View

Format: Spin column

Sample: Up to $300 \mu l$ of whole blood Up to 107; animal cultured cells Up to 108; bacterial cultured cells Up to 107 yeast

Operation: Centrifuge / vacuum manifold

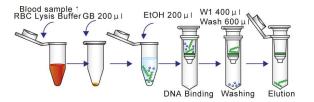
Operation time: 20~30 minutes

Application: PCR; Real-Time PCR; Southern blotting;

AFLP; PADP/ AFLP

CAT Nº

| 0018 0019 |
|--------------|
| 0029 |
| 0029 |



ATP™ Genomic DNA Maxi Kit (Blood/Cell Culture)

Description

ATP™Genomic DNA Maxi Kit (Blood/Cultured Cell) provide a fast and economical method for purification of total DNA (including genomic, mitochondrial and viral DNA) from whole blood, plasma, serum, buffy coat, other body fluids, lymphocytes, bacterial and cultured cells. In AGBM25, RBC Lysis Buffer is used to remove non-nucleated red blood cells and reduce hemoglobin contamination. In AGDM25, Proteinase K is the optimal enzyme to cell lysis for frozen blood. The method use a chaotropic salt, guanidine hydrochloride to lyse cells and degrade protein, than DNA in chaotropic salt is bond to glass-fiber matrix of column. After washing off the contaminants, the purified genomic DNA is eluted by low-salt elution buffer or water. The entire procedure can be completed without phenol/chloroform extraction and alcohol precipitation. Average yields of AGBM25/ AGDM25 are up to 140 µg of DNA from 4/10 ml of fresh/frozen blood. Purified DNA with approximate 20-30 kb is suitable for PCR or other enzyme reaction.

Quick View

Format: Maxi Spin column

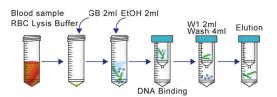
Sample: Up to 4 ml of fresh blood for AGBM25 Up to 10 ml of frozen blood for AGDM25 Operation: Centrifuge / vacuum manifold

Application: PCR: Real-Time PCR: Southern Blotting: AFLP:

PADP/ AFLP

CAT N°

| ATP™ Genomic Maxi Kit (Fresh Blood) | 25 preps | TR-BA1-0023 |
|---|----------|-------------|
| ATP™ Genomic Maxi Kit (Frozen Blood) | 25 preps | TR-BA1-0024 |



K Genomic DNA Extraction

ATP™ Genomic DNA Mini Kit (Tissue)

Description

ATPTM RNA Mini Kit (Blood/Culture cell) is specially designed for purification of total RNA from fresh whole human blood and cultured cells. This method uses detergents and a chaotropic salt to lyse cells and inactivate RNase, and then RNA in chaotropic salt is bonded to the glass fiber matrix of the column. After washing off the contaminants, the purified RNA is eluted by RNase-free water. The entire procedure can be completed in 20 minutes and the purified RNA is ready for RT-PCR, Northern blotting, primer extension and cDNA library construction.

Quick View

Format: Spin column

Sample: Up to 20 mg of tissue

Operation: Centrifuge / vacuum manifold

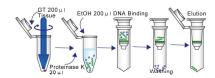
Yield: Up to 50 μg Elution volume: 50~200 μl

Application: PCR;Real-Time PCR; Southern blotting; AFLP;

PADP/ AFLP

CAT Nº

| ATP™ Genomic DNA | 50/300 | TR-BA1-0020 |
|-------------------|--------|-------------|
| Mini Kit (Tissue) | preps | TR-BA1-0021 |



ATP™ Genomic DNA Mini Kit (Plant)

Description

ATPTM Plant Genomic DNA Mini Kit provides a fast and simple method to isolate total DNA (genomic DNA, mitochondrial and chloroplast) from plant tissue and cells. In the process, sample is destroyed by grinding in liquid nitrogen and lysis buffer incubation. The Lysate is treated with RNase A to degrade RNA and filtrated by filter column to remove cell debris and salt precipitations. In the presence of binding buffer with chaotropic salt, the genomic DNA in the lysate binds to glass fiber matrix in the spin column. The contaminants are washed by wash buffer containing ethanol and finally, the purified genomic DNA is eluted by low-salt elution buffer or water. The protocol does not require DNA phenol extraction and alcohol precipitation. The entire procedure can be completed in 60 minutes.

Quick View

Format: Spin column Sample: 100 mg plant tissue

Operation: Centrifuge / vacuum manifold

Yield: 5-30µg

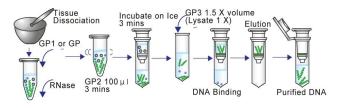
Elution volume: 50~200 µl

Application: PCR; Real-Time PCR; Southern Blotting; AFLP;

PADP/ AFLP

CAT N°

| ATP™ Genomic Mini | 50 preps | TR-BA1-0022 |
|-------------------|----------|-------------|
| Kit (plant) | | |



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Genomic & RNA Extraction **K**

ATP™ Genomic DNA Maxi Kit (Plant)

Description

ATPTM Plant Genomic DNA Mini Kit provides a fast and simple method to isolate total DNA (genomic DNA, mitochondrial and chloroplast) from plant tissue and cells. In the process, sample is destroyed by grinding in liquid nitrogen and lysis buffer incubation. The Lysate is treated with RNase A to degrade RNA and filtrated by filter column to remove cell debris and salt precipitations. In the presence of binding buffer with chaotropic salt, the genomic DNA in the lysate binds to glass fiber matrix in the spin column. The contaminants are washed by wash buffer containing ethanol and finally, the purified genomic DNA is eluted by low-salt elution buffer or water. The protocol does not require DNA phenol extraction and alcohol precipitation. The entire procedure can be completed in 60 minutes.

Quick View

Format: Spin columns Sample: 1 g plant tissue

Operation: Centrifuge / vacuum manifold

Operation time: < 60 minutes

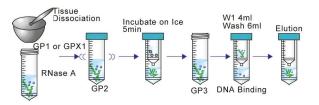
Yield: Up to 500 µg

Application: PCR; Real-Time PCR; Southern Blotting; AFLP;

PADP/ AFLP

CAT Nº

| ATP™ Plant Genomic | 25 preps | TR-BA1-0025 |
|--------------------|----------|-------------|
| DNA Maxi Kit | | |



ATP™ Total RNA Mini Kit (Blood/Culture Cell/Bacteria)

Description

ATPTM RNA Mini Kit (Blood/Culture cell) is specially designed for purification of total DNA (including: genomic, mitochondrial and viral DNA) from fresh whole human blood, plasma, serum, buffy coat, other body fluids, lymphoctes, bacteria and cultured cells. This method uses detergents and a chaotropic salt to lyse cells and inactivate RNase, and then RNA in chaotropic salt is bonded to the glass fiber matrix of the column. After washing off the contaminants, the purified RNA is eluted by RNase-free water.

Quick View

Format: Spin columns

Sample: Up to 300 µl of whole blood; Up to 106; animal cultured

cells Up to 108

bacterial cultured cells

Operation: Centrifuge / vacuum manifold

Operation time: 20 minutes

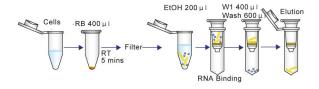
Yield: Up to 30 µg

Application: RT-PCR: Real-time PCR: Notthern blotting: mRNA

selection: cDNA synthesis Primer extension

CAT Nº

| ATP™RNA Mini Kit (Blood/Culture cel/Bact) | 50 preps | TR-BA1-0030 |
|--|----------|-------------|
| ATP™ RNA Binding Column | 50 pc | TR-BA1-0038 |



RNA Extraction & Viral Nucleic

ATP™ Total RNA Maxi Kit (Blood/Culture cell/Bacteria/ Tissue)

Description

ATP™ Total RNA Mini Kit (Tissue) is specially designed for purification of total RNA from a variety of animal tissues or cells. The provided micropestle can efficiently homogenize tissue samples in the microcentrifuge tube. The method uses detergent and a chaotropic salt to lyse cells and inactivate RNase. Then RNA in the chaotropic salt is bonded to the glass fiber matrix of the column. After washing off the contaminants, the purified RNA is eluted by RNase-free water. The entire procedure can be completed in 20 minutes and the purified RNA is ready for RT-PCR, Northern blotting, primer extension and cDNA library construction.

Quick View

Format: Maxi Spin column

Sample: 100-200 mg animal tissue 107-108 cultured cell; 5 ml

blood sample Operation: Centrifuge Operation time: 60 minutes Elution volume: 500 µl Yield: 500 µg

Application: RT-PCR; Real-Time PCR; Nothern Blotting; mRNA

Selection; cDNA Synthesis; Primer Extension

CAT N°

ATP™RNA Maxi Kit 10 preps TR-BA1-0036 (Blood/Culture cel/Bact)



ATP[™] Total RNA Mini Kit (Tissue)

Description

ATP™ Total RNA Mini Kit (Tissue) is specially designed for purification of total RNA from a variety of animal tissues or cells. The provided micropestle can efficiently homogenize tissue samples in the microcentrifuge tube. The method uses detergent and a chaotropic salt to lyse cells and inactivate RNase. Then RNA in the chaotropic salt is bonded to the glass fiber matrix of the column. After washing off the contaminants, the purified RNA is eluted by RNase-free water. The entire procedure can be completed in 20 minutes and the purified RNA is ready for RT-PCR, Northern blotting, primer extension and cDNA library construction.

Quick View

Format: Spin column

Sample: Up to 25 mg of tissue

Operation: Centrifuge / vacuum manifold

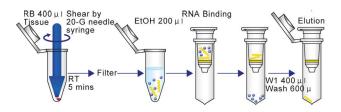
Recovry: Up to 25 μg Elution volume: 50 μl

Application: RT-PCR; Real-time PCR; Notthern blotting; mRNA

selection; cDNA synthesis; Primer extension

CAT Nº

ATP™ RNA Mini Kit 50 preps TR-BA1-0031 (Tissue)



ATP™ Total RNA Mini Kit (Plant)

Description

ATPTM Plant Total RNA Mini Kit provides a fast and simple method to isolate total RNA from plant tissue and cells. In the process, sample is first ground in liquid nitrogen and filtrated by filter column to remove cell debris. In the presence of binding buffer with chaotropic salt, the total RNA in the lysate binds to glass fiber matrix in the spin column. The optional DNase treatments can remove DNA residues and the contaminants are washed by wash buffer containing ethanol. Finally, the purified total RNA is eluted by RNase-free water. The protocol does not require phenol extraction and alcohol precipitation.

Quick View

Format: Spin column Sample: 50 mg plant tissue

Operation: Centrifuge / vacuum manifold

Operation time: 60 minutes

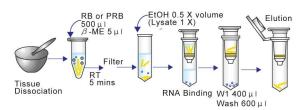
Yield: 5-30 µg Elution volume: 50 µl

Application :RT-PCR; Real-Time PCR; Nothern Blotting; mRNA

Selection; cDNA Synthesis; Primer Extension

CAT Nº

| ATP™ RNA Mini Kit | 50 preps | TR-BA1-0032 |
|-------------------|----------|-------------|
| (PLant) | | |



ATP™ Total RNA Maxi Kit (Plant)

Description

ATPTM Plant Total RNA Mini Kit provides a fast and simple method to isolate total RNA from plant tissue and cells. In the process, sample is first ground in liquid nitrogen and filtrated by filter column to remove cell debris. In the presence of binding buffer with chaotropic salt, the total RNA in the lysate binds to glass fiber matrix in the spin column. The optional DNase treatments can remove DNA residues and the contaminants are washed with an ethanol contained wash buffer. Finally, the purified total RNA is eluted by RNase-free water. The protocol does not require phenol extraction and alcohol precipitation.

Quick View

Format : Spin column Sample:500 mg plant tissue

Operation : Centrifuge / vacuum manifold

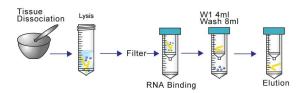
Operation time:60 minutes

Yield:50-300 µg

Elution volume: $50~\mu$ l Application ,RT-PCR, Real-Time PCR, Notthern blotting, mRNA selection, cDNA synthesis, Primer extension

CAT N°

| ATP™ Plant RNA Maxi | 10 preps | TR-BA1-0037 |
|---------------------|----------|-------------|
| Kit | | |



K Viral Nucleic

ATP™ Viral Nucleic Acid Extraction Kit

Description

ATPTM Viral Nucleic Acid Extraction Kit is specially designed for high-throughput purification of viral RNA or DNA from cell-free samples as serum, plasma, body fluids, and the supernatant of viral infected cell culture. With the extraction method, DNA/RNA viruses are lysed quickly and efficiently by lysis buffer which is a highly concentrated solution of chaotropic salt. Nucleic acid in chaotropic salt and methanol are bond to the glass-fiber matrix of viral DNA/RNA Binding Column. Contaminations like salts, metabolites and soluble macromolecular components are removed in Washing Steps. The nucleic acids can be eluted by low-salt buffer or water and are ready-to-use in subsequent reactions. The detection limit for certain viruses depends on the sensitivity of individual PCR or RT-PCR assay. This protocol is recommended for parallel purification of viral RNA including HCV, HIV, HTLV and viral DNA including HBV and CMV.

Quick View

Format: Spin column

Sample: 200 µl of serum, plasma, body fluid and cell culture

supernatant

Operation: Centrifuge / vacuum manifold

Operation time: 40 minutes Elution volume: 50 µl

CAT N°

ATP™ Viral Nucleic Acid 50 preps TR-BA1-0033 Mini Kit



Related Products CAT Nº

| ATP™96-Well Plasmid mini kit | 4/10 plates | TR-BA1-0006 // TR-BA1-0007 |
|---|-------------------|----------------------------|
| ATP™ Plasmid Mini Binding Column | 50 pc | TR-BA1-0008 |
| ATP™ Plasmid Midi Resin Column | 10 pc | TR-BA1-0009 |
| ATP™ Plasmid Maxi Resin Column | 10 pc | TR-BA1-0010 |
| ATP™ 96-Well Gel/PCR DNA Extraction Kit | 4/10 plates | TR-BA1-0013 // TR-BA1-0014 |
| ATP™ 96-Well SEQ Dye Clean Up Kit | 4/10 plates | TR-BA1-0015 // TR-BA1-0016 |
| ATP™ Fragment DNA Binding Column | 50 pc | TR-BA1-0017 |
| ATP™ 96-Well Genomic DNA Kit | 4/10 plates | TR-BA1-0026 // TR-BA1-0027 |
| ATP™ Reagent Genomic DNA Kit | for 100 ml Blood | TR-BA1-0028 |
| ATP™ Genomic DNA Binding Column | 50 pcs | TR-BA1-0029 |
| ATP™ 96-Well Viral Nucleic Acid Kit | 4/10 plates | TR-BA1-0034 // TR-BA1-0035 |
| ATP™ RNA Binding Column | 50 pcs | TR-BA1-0038 |
| Proteinase K | 11 mg/kit | TR-BA1-0039 |
| RNase A | 0.2 ml (50 mg/ml) | TR-BA1-0040 |
| RNase A | 1.5 ml (50 mg/ml) | TR-BA1-0041 |