RNA ISOLATION

RNAzol®RT

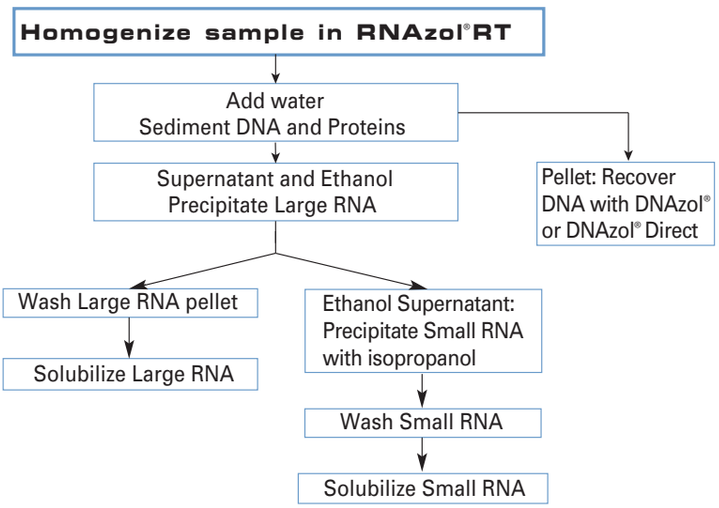
RNAzol®RT is the most effective reagent for isolation of total RNA and small RNA from samples of human, animal, plant, bacterial and viral origin. This patented reagent(1) provides higher yield and quality of isolated RNA than previous reagents based on the single-step method. RNAzol RT isolates pure and undegraded RNA that is ready for RT-PCR without DNase treatment.(2)

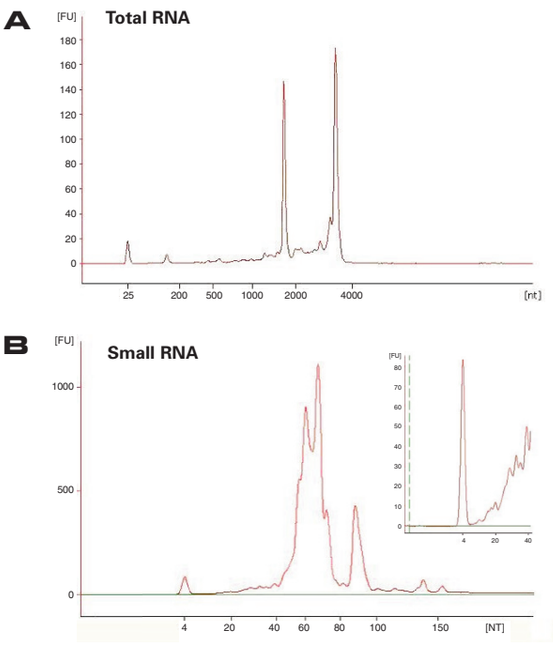
- No chloroform-induced phase separation is necessary to obtain pure RNA. Just add water to remove DNA, proteins, polysaccharides and other contaminants.
- The isolation procedure can be completed in less than one hour and is performed at room temperature, including all centrifugation steps.
- RNAzol® RT isolates total RNA, or large RNA and small RNA in separate fractions. The large RNA fraction contains rRNA and mRNA. The small RNA fraction contains tRNA, small RNA and microRNA down to 10 bases.
- The isolated RNA is ready for RT-PCR, qRT-PCR, microarrays, poly A+ selection, northern blotting, RNase protection assay and other molecular biology applications.
- Due to the removal of impurities, the RNA pellets are smaller and solubilize more easily than pellets obtained from previous single-step reagents.
- In addition, RNAzol RT allows for the simultaneous isolation of RNA and DNA.

	CAT #	VOL
RNAzol®RT is used to isolate RNA from tissues, cells, liquid samples or blood. One milliliter is sufficient to process up to 100 mg tissue yielding 50 - 700 µg of large RNA and 8 - 120µg of small RNA.	RN 190	50 ml 100 ml 200 ml 500 ml

References

1. US patents 7,794,932 and 8,367,817. International patents.
2. Chomczynski, P. et al. RNAzol RT: A new single-step method for isolation of RNA. Nature Methods. December, 2010.





Agilent RNA Nano Chip and Small RNA Chip analysis of rat liver total RNA (A) and small RNA (B), respectively. High quality total RNA had a RIN value of 9.2 and 28/18 S ratio of 1.6. miRNA region (B, inset) represents about 5% of small RNA.

RNA ISOLATION

RNAzol®BD

RNAzol®BD is the most effective reagent for isolation of total RNA from whole blood, plasma or serum of human or animal origin. This patented reagent(1) employs an improved single-step method to provide the highest yield and purity of isolated RNA. RNAzol BD isolates pure and undegraded RNA that is ready for RT-PCR without DNase treatment (2).

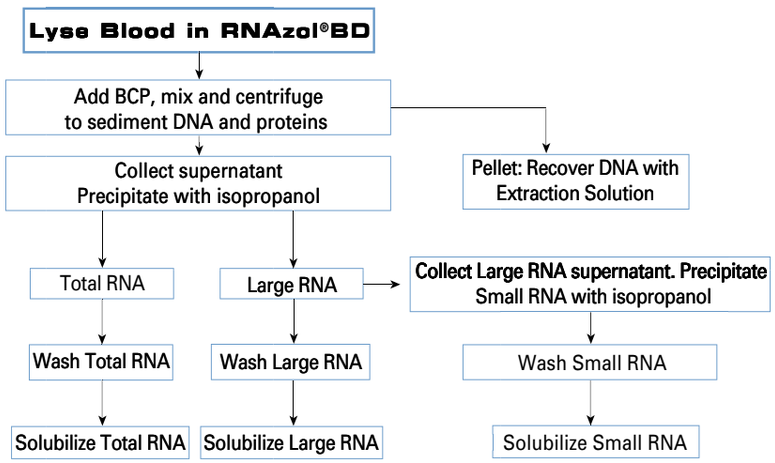
- RNAzol®BD isolates total RNA, or large RNA and small RNA in separate fractions. The large RNA fraction contains rRNA and mRNA. The small RNA fraction contains tRNA, small RNA and microRNA down to 10 bases.
- RNAzol®BD allows for the isolation of RNA and DNA from the same blood sample.
- The RNA isolation procedure can be completed in 1.5 hours and is performed at room temperature, including centrifugation steps.
- Typical yields provide 8 - 22 µg total RNA per 1ml of human blood.
- The isolated RNA is ready for RT-PCR, qRT-PCR, microarrays, poly A+ selection, northern blotting, RNase protection assay and other molecular biology applications.
- Due to the removal of impurities, the RNA pellets are smaller and solubilize more easily.

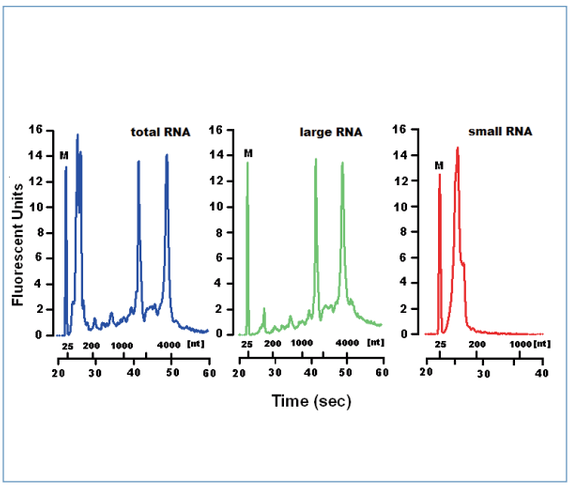
RNAzol®BD is used to isolate RNA from whole blood, plasma or serum. One milliliter is sufficient to process 0.5 ml of whole blood.

CAT #	VOL
RB 192	50 ml
	100 ml
	200 ml
	500 ml

References

1. US patents 7,794,932 and 8,367,817. International patents.
2. Chomczynski, P. et al. RNAzol BD: A reagent for the effective isolation of RNA from whole blood. Nature Methods. May, 2013.





For a complete product protocol, contact MRC at 888-841-0900 or visit our website at www.mrcgene.com.

RNA ISOLATION

RNAzol®RT Column Kit

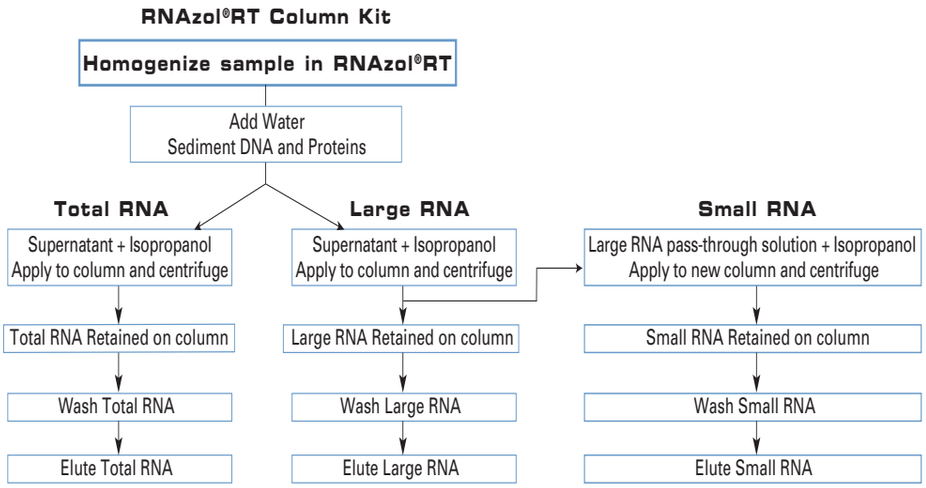
The RNAzol®RT Column Kit combines RNAzol®RT, the most effective reagent for isolation of RNA, with a versatile and universal column in one procedure. This unique Kit isolates large RNA and small RNA in separate fractions, or total RNA in a single fraction. The RNAzol®RT Column Kit accommodates 50 total, large or small RNA isolations. The multiple applications available with this Kit make it one of the most cost effective and efficient RNA isolation procedures available.

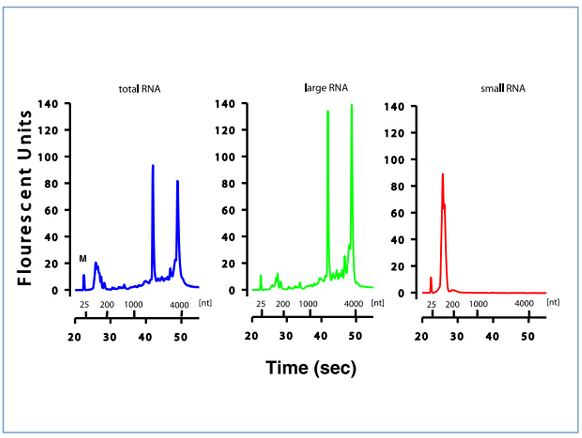
- The universal column can be used to isolate total RNA, large RNA, or small RNA.
- The large RNA fraction includes long non-coding RNA, mRNA and rRNA.
- The small RNA fraction includes tRNA, small rRNA and microRNA down to 10 bases.
- Isolate total and large RNA fractions in 30 minutes. Isolate small RNA in 60 minutes.
- At least 300 µg RNA can be isolated on a single column.

RNAzol®RT Column Kit isolates pure and undegraded RNA from solid and liquid samples of human, animal, plant, bacterial and viral origin.

Kit Contents:
50 ml RNAzol® RT
50 Columns with Collection Tubes
50 Wash Tubes
50 Elution Tubes
10 ml RNase-free Water

CAT #
RC 290





For a complete product protocol, contact MRC at 888-841-0900 or visit our website at www.mrcgene.com.

MRC RNA ISOLATION

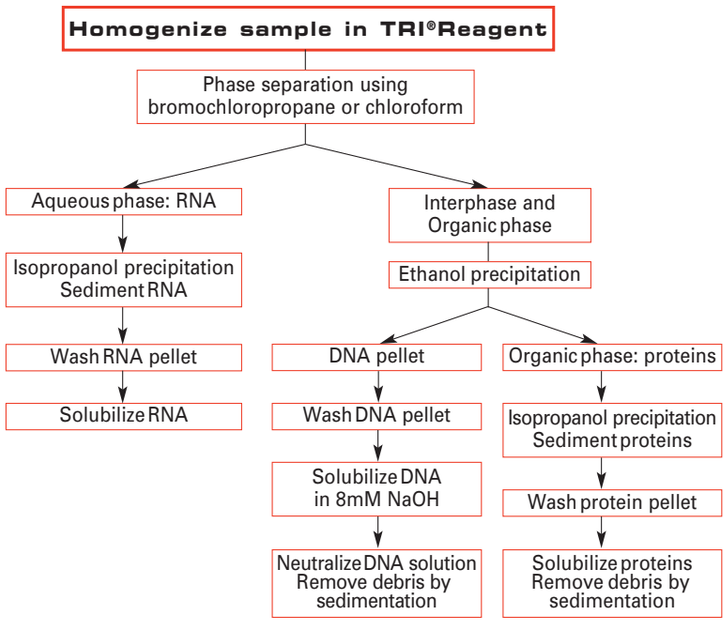
TRI Reagent®

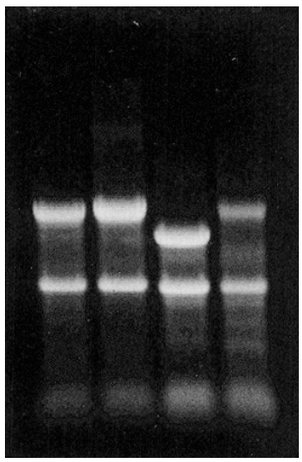
TRI Reagent® is a patented reagent for the isolation of total RNA or for the simultaneous isolation of RNA, DNA and proteins. The reagent is an improved version of the popular single-step method for total RNA isolation (1,2,3). It is a monophase solution containing phenol and guanidine thiocyanate. TRI Reagent provides a reliable, cost effective and efficient method of RNA isolation. TRI Reagent allows for a comprehensive analysis of gene expression in a variety of samples of human, animal, plant, yeast, bacterial and viral origin. RNA isolation is complete in less than one hour, and DNA and protein isolations in less than three hours. Three versions of TRI Reagent are available, each designed for optimal isolation efficiency from certain types of samples.

	CAT #	VOL
TRI Reagent® is used for RNA isolation from tissues, pelleted cells and cells grown in monolayer. Fifty milliliters is sufficient to process 50 samples, each containing 50 – 100 mg of tissue. Expected yields range from 50 – 700 µg of RNA per sample, depending upon the tissue source.	**TR 118**	50 ml 100 ml 200 ml 500 ml
TRI Reagent® BD is designed for use with whole blood and plasma. Fifty milliliters is sufficient to process 65 samples of 0.25 ml each.	**TB 126**	50 ml 100 ml 200 ml 500 ml
TRI Reagent® LS is used for cell suspensions and other liquid samples. Fifty milliliters is sufficient to process 65 samples of 0.25 ml each.	**TS 120**	50 ml 100 ml 200 ml 500 ml

References

US Patents 4,843,155 and 5,346,994.
1. Chomczynski, P. and Sacchi, N. Single-step method of RNA isolation by acid guanidinium thiocyanatephenol-chloroform extraction. Anal. Biochem. 162: 156-159. 1987.
2. Chomczynski, P. A reagent for the single-step simultaneous isolation of RNA, DNA and proteins from cell and tissue samples. BioTechniques. 15: 532-537. 1993.
3. Chomczynski, P., Bowser-Finn, R. and Sabatini, L. A reagent for the single-step isolation of viral RNA from human serum and biopsy samples. J. NIH Res. 6:83. 1994.





TRI Reagent® was used to isolate total RNA from rat kidney (lane 1), P_0 cells (lane 2), leafy sprouts (lane 3) and human blood (lane 4).

For a complete product protocol, contact MRC at 888-841-0900 or visit our website at www.mrcgene.com.

MRC RNA ISOLATION

BCP – Phase Separation Reagent

CAT #	VOL
BP 151	200 ml

Phase Separation Reagent is molecular biology grade 1–bromo–3–chloropropane (BCP). It replaces chloroform, the highly volatile compound commonly used for phase separation in the single-step method of total RNA isolation and in the TRI Reagent® method. Substituting BCP for chloroform moderately improves the quantity and quality of the isolated RNA (1).

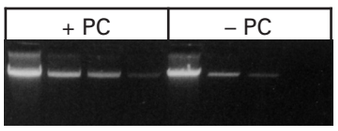
References

1. Chomczynski, P. and Mackey, K. Substitution of chloroform by bromochloropropane in the single-step method of RNA isolation. Anal. Biochem. 225: 163-164. 1995.

Polyacryl Carrier

CAT #	VOL
PC 152	5 ml

Polyacryl Carrier is a molecular biology grade solution of acryl polymer designed for use in the isolation of small amounts of RNA or DNA. Biological solutions or solutions containing nucleic acids are supplemented with 2-8 µl of Polyacryl Carrier and isolation procedures are performed according to protocol. The carrier does not affect the activity of restrictases, reverse transcriptase, Taq polymerase, DNA polymerase, ligase or other enzymes used for nucleic acid analysis.



Polyacryl Carrier increases the recovery of small amounts of DNA. Bacterial DNA (500, 100, 50 and 10 ng) was precipitated with (lanes 1-4) and without (lanes 5-8) Polyacryl Carrier.

Precipitation Carrier

CAT #	VOL
PC 173	5 ml

This molecular biology grade Carrier is specially designed for use with RNAzol® RT, which removes all other contaminants and carriers during the RNA isolation procedure. Use 2-4 µl of Carrier when sedimenting minute quantities of either small or large RNA, which are isolated as two separate fractions with RNAzol® RT.

High Salt Precipitation Solution

CAT #	VOL
PS 161	100 ml

The High Salt Precipitation Solution is used in the TRI Reagent® procedure to isolate RNA from samples containing large amounts of polysaccharides and/or proteoglycans. This molecular biology grade reagent contains sodium chloride and sodium citrate.

References

1. Chomczynski, P. and Mackey, K. Modification of the TRI Reagent procedure for isolation of RNA from polysaccharide- and proteoglycan-rich sources. BioTechniques. 19: 492-495. 1995.

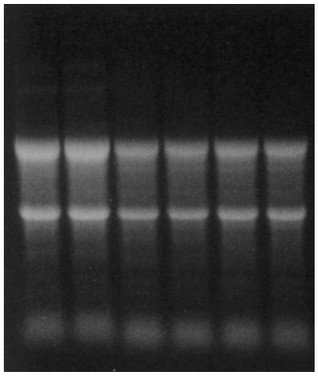
FORMAzol®

CAT #	VOL
FO 121	25 ml

FORMAzol® is molecular biology grade formamide that remains stable for one year when stored at 4 C or for two years when stored at -20 C. This stabilized formamide serves as an excellent RNA solubilizer and has been shown to have several advantages over water as an RNA solubilization agent (1). RNA solubilized in FORMAzol is protected from degradation by RNase and can be stored at -20 C instead of -70 C. Solubilization of RNA in formamide facilitates the application of RNA to a formaldehyde-agarose gel in northern analysis.

References

1. Chomczynski, P. Solubilization in formamide protects RNA from degradation. Nucleic Acids Res.20(14): 3791-3792. 1992.



Total RNA (3µg/lane) remains intact after extended storage in FORMAzol at -20 C for eight years (lanes 1-2), three years (lanes 3-4) and one month (lanes 5-6). RNA was isolated from MCF7 cells, rat testes and rat kidney, respectively.

Disposable Polypropylene Centrifuge Tubes

These tubes have been tested with TRI Reagent® and shown to maintain structural integrity at centrifugal forces up to 12000 g. Dimensions listed below describe external diameter and tube length. Please note that the internal diameter of centrifuge adapters should not exceed external tube diameter by more than 2 mm. Tubes that have been frozen previously may crack if spun in centrifuge adaptors that are too large. The tubes can be autoclaved at temperatures up to 135 C; caps should not be autoclaved. Series A tubes have standard snap-in caps. Series B tubes have double-edge caps that reduce the hazard of phenol spills when opening or closing tubes. The tube design allows centrifugation with caps on, assuming added length does not interfere with the rotor lid.

		CAT #	QTY
Series A	5 ml (13 x 75 mm)	**PP 141A**	125/box
	8 ml (13 x 100 mm)	**PP 142A**	125/box
	13 ml (17 x 95 mm)	**PP 143A**	75/box
	20 ml (21 x 100 mm)	**PP 144A**	50/box
Series B	5 ml (13 x 75 mm)	**PP 141B**	125/box
	8 ml (13 x 100 mm)	**PP 142B**	125/box
	13 ml (17 x 95 mm)	**PP 143B**	75/box

Disposable Polypropylene Microfuge Tubes

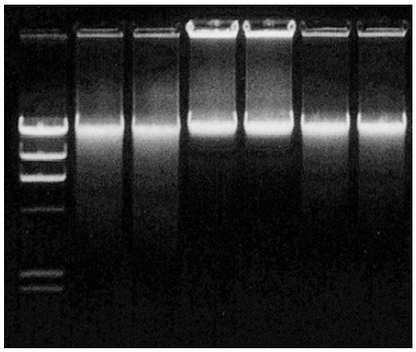
These tubes have been tested with TRI Reagent® and shown to maintain structural integrity at centrifugal forces up to 12000 g. They fit Eppendorf® centrifuges and have screw caps to reduce the hazard of phenol spills during handling.

	CAT #	QTY
2 ml non-serile tubes	**PP 131**	200/box
2 ml sterile tubes	**PP 132**	200/box

DNA ISOLATION

DNAzol®

DNAzol® is a complete and ready to use reagent for the isolation of genomic or viral DNA from solid and liquid samples of human, animal and plant origin. The DNAzol procedure is based on the use of a novel guanidine – detergent lysing solution that hydrolyzes RNA and promotes the selective precipitation of DNA from the cell lysate (1, 2). This advanced DNA isolation method combines reliability and efficiency with the simplicity of a fast isolation protocol. DNAzol is a non-toxic solution and the procedure does not require the use of phenols. DNA can be obtained from a large number of samples of small or large volume; 50 ml of DNAzol is sufficient to process 50 samples, each with 25 – 50 mg of tissue. Genomic DNA isolation can be completed in 10 – 30 minutes with DNA recovery of 70 – 100%. Isolated DNA can be used for Southern analysis, dot blot hybridization, molecular cloning and polymerase chain reaction. There are 3 versions of DNAzol, each designed for optimal isolation efficiency from various types of samples.



DNAzol was used to isolate genomic DNA from rat liver tissue (lane 1-2), human blood (lanes 3-4) and adult growth leaves (lanes 5-6).

	CAT #	VOL
DNAzol® is for use with tissues, cells and liquid samples. 1.0 ml of DNAzol isolates DNA from 25 – 50 mg tissue or from cell pellets containing 1 – 3 x 10^7 cells.	**DN 127**	50 ml 100 ml 200 ml 500 ml
DNAzol® ES is extra strength DNAzol for the isolation of genomic DNA from plants. 1.5 ml of DNAzol ES isolates DNA from 0.5 g of plant tissue.	**DN 128**	50 ml 100 ml 200 ml 500 ml
DNAzol® BD is specifically designed for the isolation of genomic or viral DNA from whole blood. 1.5 ml of DNAzol BD isolates DNA from 0.5 ml of whole blood.	**DN 129**	50 ml 100 ml 200 ml 500 ml

References

US Patent 5,945,515.
1. Chomczynski, P., Mackey, K., Drews, R., and Wilfinger, W. DNAzol®: A reagent for the rapid isolation of genomic DNA. BioTechniques. 22: 550-553. 1997.
2. Mackey, K., Williams, P., Seim, S. and Chomczynski, P. The use of DNAzol® for the rapid isolation of genomic DNA for whole blood. Biomed. Products. Supplement: 13-15. 1996.

DNA ISOLATION

Summary of the DNAzol® procedure.

homogenize sample
optional centrifugation

↓

supernatant
containing DNA

↓

ethanol precipitation
sediment DNA

↓

wash DNA pellet

↓

solubilize DNA
in 8mM NaOH

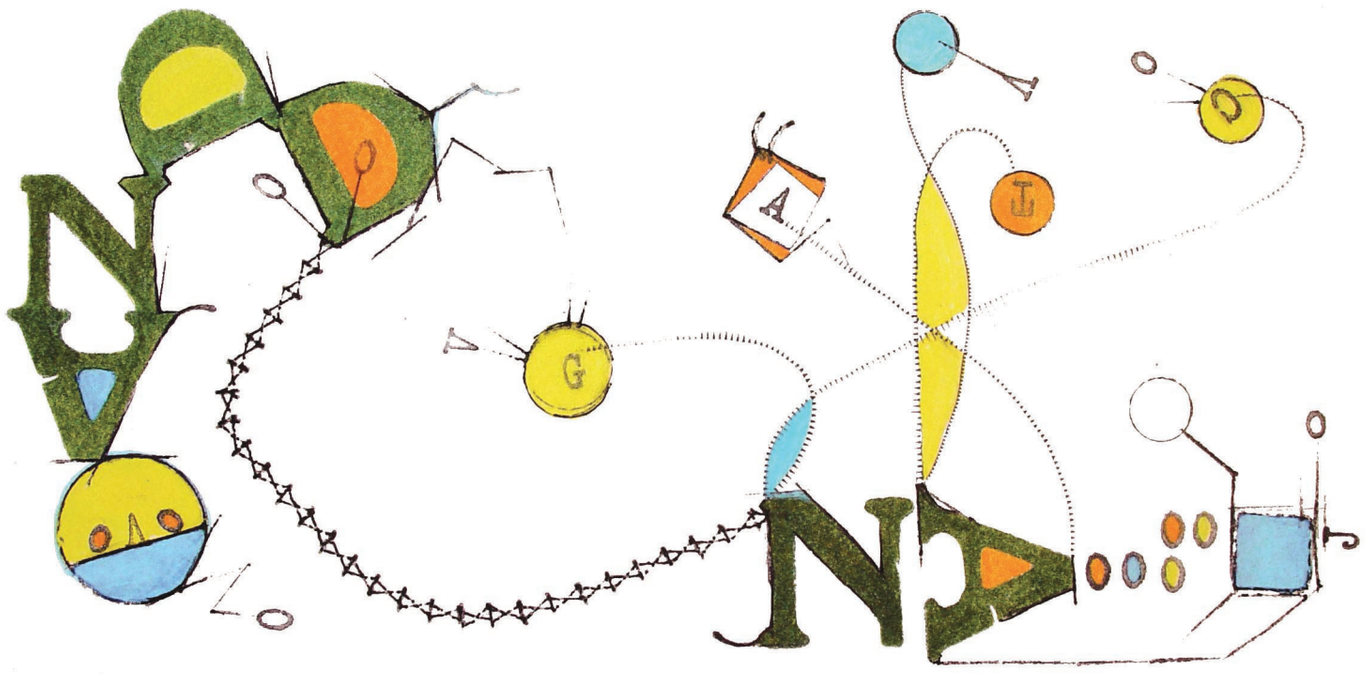
↓

neutralize DNA solution
remove debris by
sedimentation

Approximate yields from a variety of sources processed using DNAzol.

source	µg DNA / mg tissue	n
liver	4.3 ± 0.7	7
kidney	3.6 ± 0.2	12
spleen	22.8 ± 4.1	5
heart	2.0 ± 0.4	3
lung	2.5 ± 0.4	3
skeletal muscle	0.8	1
pituitary cells	6.9 µg/10^6 cells	1
plant tissue*	0.05 – 0.30	
blood	35 ± 3.9	6

*yields from plant vary widely depending upon the sample material.

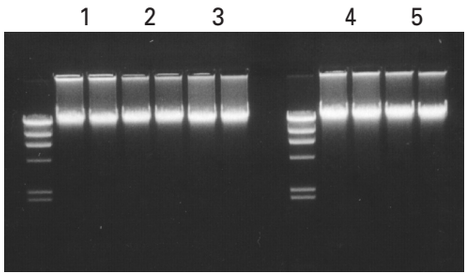


For a complete product protocol, contact MRC at 888-841-0900 or visit our website at www.mrcgene.com.

DNA ISOLATION

Bactozol™ Kit

Bactozol™ is a kit for the isolation of DNA from gram-negative and gram-positive bacteria. The Kit includes Bactozol™ Enzyme Solution and DNAzol®. Bactozol Enzyme Solution is a solution containing activated lysozyme that effectively lyses a broad range of bacterial specimens. It is supplied as a convenient 10X stock solution that maintains enzyme stability at room temperature and precludes the daily preparation of lysozyme stock solutions. After bacterial lysis with Bactozol Enzyme Solution, DNAzol® is used to isolate high quality DNA in a simple and efficient protocol. The Bactozol Enzyme Solution - DNAzol® procedure isolates both genomic and plasmid DNA from diverse bacterial samples. The Bactozol procedure can accommodate gram-positive bacteria that are more difficult to lyse and often produce lower DNA recovery, such as Staphylococcus and Streptococcus.



DNA (1 µg/ lane) isolated from gram-negative (1) Escherichia coli, (2) Citrobacter braakii, (3) Agrobacterium rhizogenes, and gram-positive (4) Bacillus subtilis and (5) Micrococcus luteus bacteria.

CAT #	QTY
BA 154	125 isolations

Bactozol™ Kit includes 50 ml of DNAzol®, 1.3 ml of 10X Bactozol™ Enzyme Solution and 15 ml of Dilution Buffer. The kit has sufficient reagents to process 125 bacterial pellets derived from 0.5 - 2.0 ml of culture, each containing up to 40 µg of bacterial DNA.

References

1. Chomczynski, P., Mackey, K., Drews, R., and Wilfinger, W. DNAzol®: A reagent for the rapid isolation of genomic DNA. BioTechniques. 22: 550-553. 1997.

Bactozol™ Enzyme Solution

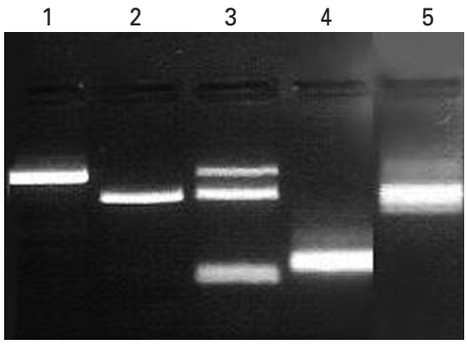
Bactozol™ Enzyme Solution is a concentrated solution containing activated lysozyme that can be used to lyse both gram-positive and gram-negative bacteria. It is supplied as a convenient 10X stock solution that is diluted with buffer to prepare a 1X working solution. The 10X Bactozol Enzyme Solution stock solution maintains enzyme stability at room temperature and allows researchers to forego the daily preparation of lysozyme solutions. For DNA isolation, the Bactozol Enzyme Solution lysis procedure can be used in conjunction with DNAzol® or other DNA isolation methods. The Bactozol Enzyme Solution lysis procedure can accommodate gram-positive bacteria that are more difficult to lyse and often produce lower DNA recovery, such as Staphylococcus and Streptococcus.

CAT #	VOL
BZ 160	1.3 ml

DNAzol® Direct

CAT #	VOL
DN 131	25 ml 50 ml

DNAzol® Direct is a universal reagent for processing biological samples for direct PCR. No DNA isolation is required. The DNAzol Direct procedure is simple and fast. Lyse a sample in DNAzol Direct for 15 min, add an aliquot of the lysate to a PCR mix, and perform amplification of a selected DNA fragment(s). DNAzol Direct simultaneously acts to release and denature DNA into a single-stranded form, hydrolyze RNA, and denature and partially hydrolyze proteins. The patent-pending DNAzol Direct composition and procedure are based on an alkaline solution containing polyethylene glycol and other additives. The combined effects of the alkaline pH and chaotropic properties of this reagent are sufficient to effectively inactivate PCR inhibitors including proteases and nucleases. This protocol eliminates columns, centrifugation steps and DNA precipitation. The standard DNAzol Direct procedure supports PCR amplification of DNA fragments up to 8 kb long.



Amplified DNA fragments were eletrophoretically separated in a 2% agarose gel. (1) LCT from human saliva; (2) cfos from human blood; (3) LCT, cfos, cox2 multiplex from human blood; (4) GAPDH from rat liver; (5) 5S rRNA from wheat.

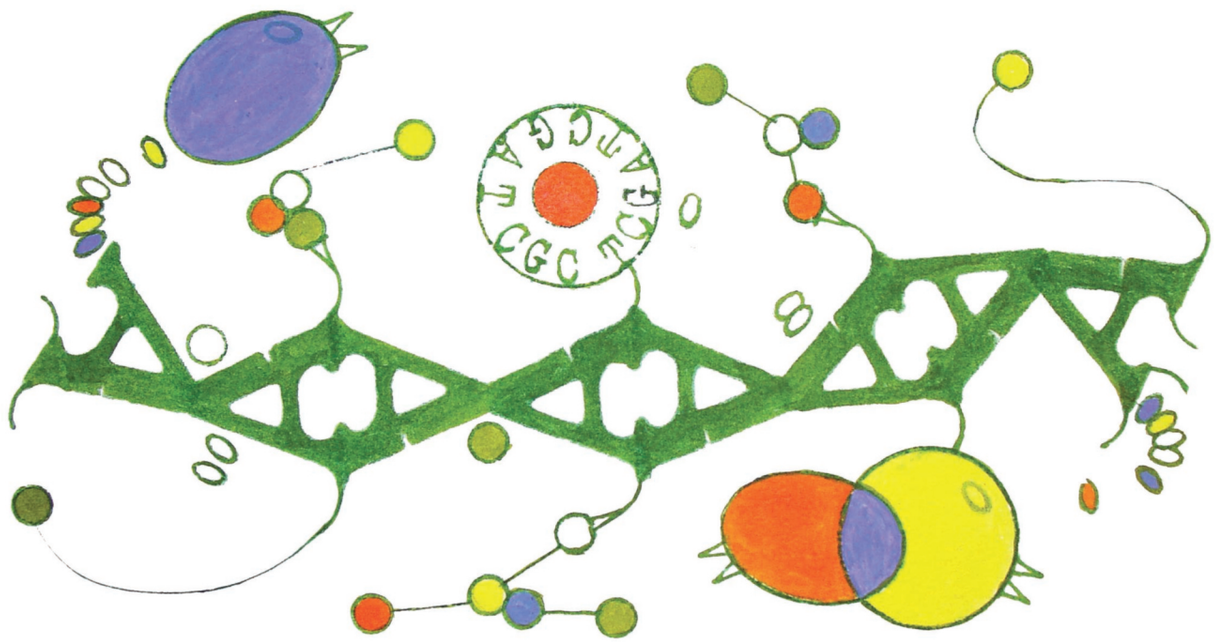
DNAzol® Direct is designed to process a wide range of samples including animal, plant, fungi, yeast, bacterial, and viral samples. It has been used with blood, serum and plasma, saliva, buccal swabs, blood cards, hairs and feathers, leaves and seeds, and formalin-fixed tissues.

Protocol

1) Mix 1-10 µl fluid or 1-10 mg of solid sample with 0.1 ml of DNAzol® Direct.

2) Lyse the sample by incubation for 15 min at room temperature.

3) Vortex the lysate and transfer 2-5 µl of lysate directly into a 20-50 µl PCR mix. The lysate volume should not exceed 10% of the reaction volume.

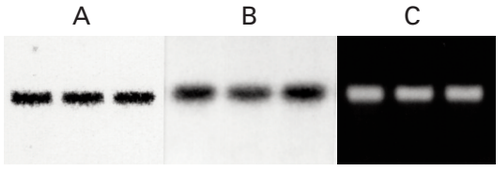


For technical assistance, contact Molecular Research Center at 800-462-9868 or 888-841-0900.

MRC ELECTROPHORESIS & HYBRIDIZATION

Super Hyb™ Kit

The Super Hyb™ Kit is a complete hybridization system that provides exceptionally high signal intensity and low background on spot-free northern, Southern and dot-blot hybridizations. This system allows detection of rare mRNA in total RNA and can eliminate the need to isolate poly A^+ RNA. The Kit provides faster and simpler procedures and works well with radioactive or non-radioactive detection methods. It may be used with nitrocellulose or a variety of charged or non-charged nylon membranes.



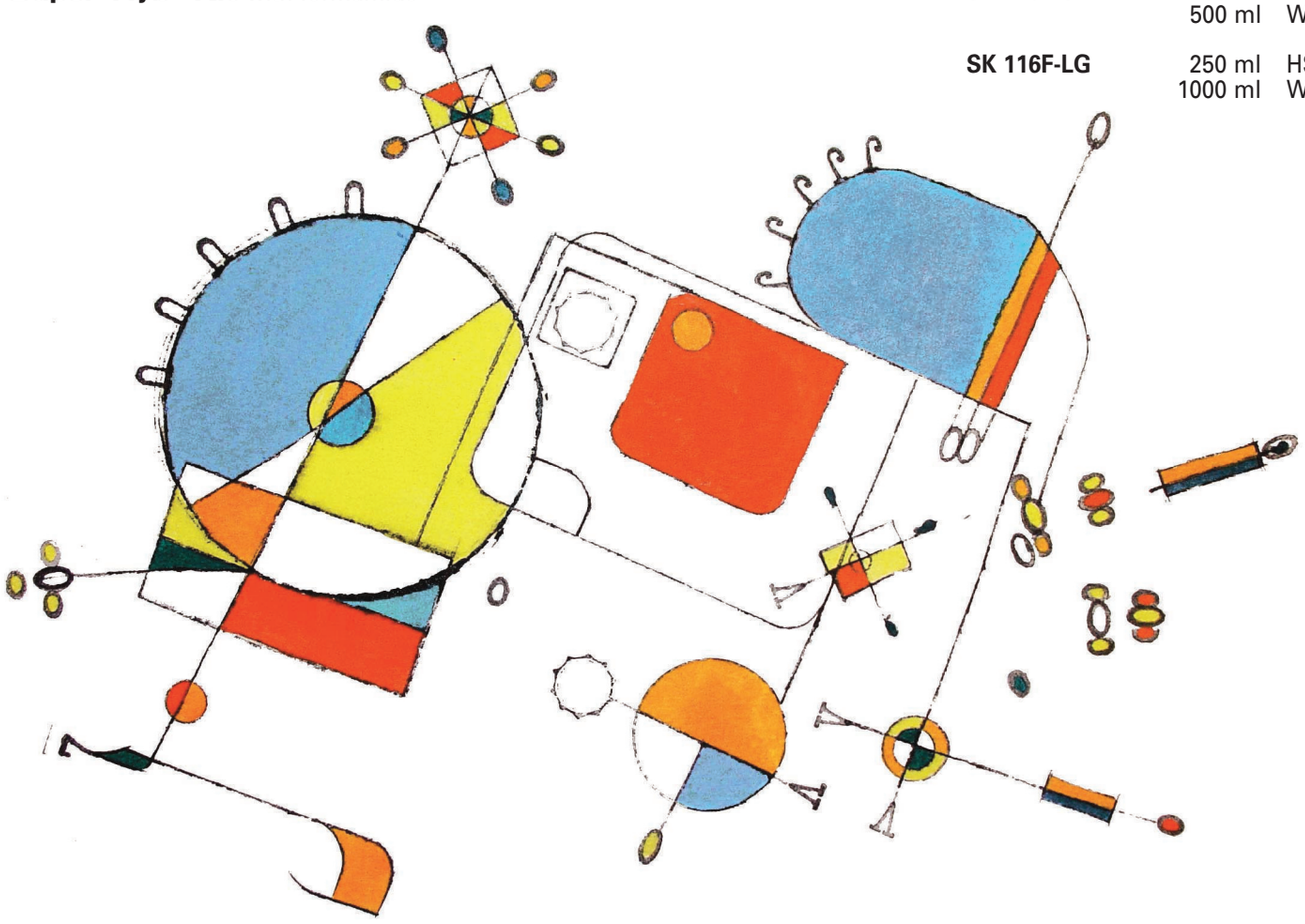
Hybridization of rat total RNA (5µg/lane). Detection of α_{1s} subunit of skeletal muscle DHP receptor (A) and hypothalamic GHRH (B) using ^{32}P probe. Non-radioactive detection of GAPDH (C).

The Super Hyb™ Kit includes two solutions. The High Efficiency Hybridization System (without or with formamide, HS 114 and HS 114F, respectively) increases hybridization efficiency by blocking nonspecific binding of probes and enhancing hybridization signal intensity. The Washing & Pre-Hyb Solution (WP 117) allows both pre- and post-hybridization washes to be performed at room or elevated temperatures. The Super Hyb™ Kit is available in small and large volumes and reagents also may be purchased individually.

Super Hyb™ Kit without formamide

Super Hyb™ Kit with formamide

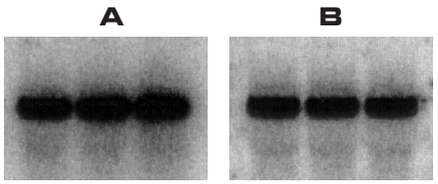
CAT #	VOL	
SK 116-SM	100 ml 500 ml	HS 114 WP 117
SK 116-LG	250 ml 1000 ml	HS 114 WP 117
SK 116F-SM	100 ml 500 ml	HS 114F WP 117
SK 116F-LG	250 ml 1000 ml	HS 114F WP 117



High Efficiency Hybridization Systems

The High Efficiency Hybridization System is a complete and ready to use hybridization solution for northern, Southern and dot-blot hybridization. The composition includes Background Quencher™ and dextran sulfate supplemented with 0.9 M NaCl and 1% SDS. High Efficiency Hybridization System with Formamide also contains 50% formamide. The mechanisms to increase hybridization efficiency involve the blocking of nonspecific binding of hybridization probes by Background Quencher and the enhancement of the hybridization signal through the formation of a dextran sulfate-supported network of double stranded DNA. These systems may be used with traditional radioactive detection or newer non-radioactive methods. The High Efficiency Hybridization Systems perform better than traditional systems using Denhardt's solution as the blocking agent. Subsequently, prehybridization may be completed in 30 minutes and one hour of hybridization is sufficient to detect target RNA in total RNA preparations. The use of HS 114 or HS 114F allows detection of many rare RNAs in preparations of total RNA, avoiding the need for mRNA isolation procedures.

CAT #	VOL
HS 114	100 ml 250 ml 500 ml
HS 114F	100 ml 250 ml 500 ml



Northern blot autoradiograms for the α_{1s} subunit of the rat skeletal muscle DHP receptor (5µg total RNA/lane). Membranes were hybridized overnight in HS114 and washed at room temperature (A) or 55 C (B).

Washing & Pre-Hyb Solution

Washing & Pre-Hyb Solution is supplied as a 10X concentrate for use in northern and Southern blotting. This solution allows both pre- and post-hybridization washes to be performed at room or elevated temperatures. It can be used with a variety of charged or non-charged nylon and nitrocellulose membranes and with radioactive or non-radioactive detection systems. The Washing & Pre-Hyb Solution is recommended for use with the High Efficiency Hybridization System (cat. # HS 114 and HS 114F) and is a component of the Super Hyb™ Kit (cat. # SK 116 and SK 116F).

CAT #	VOL
WP 117	500 ml 1000 ml

Background Quencher™

CAT #	VOL
BQ 112	30 ml 60 ml

Background Quencher™ is a specially designed solution for use as a blocking reagent in hybridization assays. It effectively prevents non-specific binding of hybridization probes and virtually eliminates the need to supplement hybridization solutions with DNA and/or RNA. Background Quencher does not contain any nucleic acids, thereby avoiding problems associated with the use of DNA fragments commonly used to decrease background hybridization. The use of Background Quencher can shorten prehybridization steps to 15 minutes. It is supplied as a 10X solution and can be used with double- or single-stranded probes, in solutions with or without formamide, and with or without dextran sulfate.

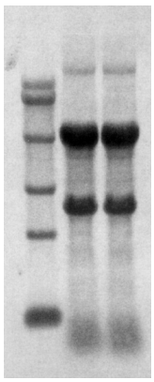
Methylene Blue Stain

CAT #	VOL
MB 119	500 ml

Methylene Blue Stain is an aqueous solution of methylene blue designed for quantitative and qualitative assessment of RNA and DNA immobilized on hybridization membranes. It can be used to verify the amount of RNA on hybridization membranes in northern blotting. Unlike the carcinogenic agent, ethidium bromide, Methylene Blue Stain does not intercalate in nucleic acid chains and accordingly, does not interfere with nucleic acid retention on hybridization membranes or with the hybridization process (1). Methylene Blue Stain has been tested and found appropriate for nylon/plastic or nitrocellulose membranes, although nitrocellulose exhibits increased background staining. Methylene Blue Stain is reusable and detects approximately 25 ng of RNA or DNA per band. The staining procedure is fast (10 min.) and simple.

References

1. Maniatis, T., Fritsch, E.F. and Sambrook, J. 1982. Molecular Cloning. Cold Spring Harbor Press. Cold Spring Harbor, NY.



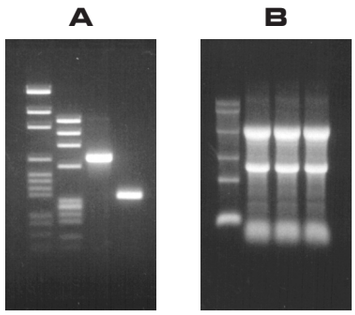
Total RNA (3 µg) and 0.24 - 9.5 Kb RNA ladder transferred onto Nytran® membrane and stained with Methylene Blue Stain.

ELECTROPHORESIS & HYBRIDIZATION

Super Agarose

CAT #	VOL
SA 153	200 ml 500 ml

Super Agarose is the first agarose provided as an aqueous suspension. It is designed to achieve maximum electrophoretic separation of nucleic acids with reliability and convenience. Supplied as a 10% stock suspension, Super Agarose can be diluted with TAE, TBE or MOPS electrophoresis buffers to obtain a required agarose concentration. Weighing of an agarose powder is no longer necessary. Exceptional electrophoretic resolution makes Super Agarose the product of choice for Southern and northern analysis, PCR, RNase protection assay and other molecular biology applications.

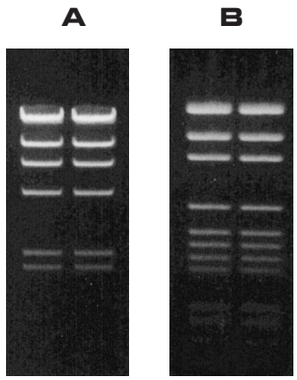


(A) Markers and PCR product in 2% Super Agarose. (B) Markers and total RNA in 1% Super Agarose.

Molecular Biology Agarose

CAT #	QTY
MA 124	100 g 200 g

This ultra pure agarose is RNase-, DNase-, and protease-free, with gel strength, electroendosmosis and sulfate content optimized for a high resolution electrophoretic separation. A 1 – 3% gel of Molecular Biology Agarose provides excellent separation during electrophoresis and allows easy differentiation of PCR products. Supplementation with expensive and specially formulated agarose is not necessary. In addition, this agarose allows maximum efficiency in the transfer of DNA or RNA to hybridization membranes for Southern and northern analysis, respectively.



Molecular weight markers were electrophoretically separated in Molecular Biology Agarose. (A) λDNA/Hind III in 1% agarose. (B) pGEM® in 3% agarose.