RBC **Real Genomic**
Quality Nucleic Acid Purification Systems

RNA Extraction

Reliable RNA purification

Total RNA Extraction Kit (Blood/Bacteria/Cultured Cells)

The Total RNA Extraction Kit (Blood/Bacterial/Cultured Cells) is specially designed for purification of total RNA from bacterial, cultured cells and fresh human whole blood. The method uses detergents and a chaotropic salt to lyse the cells and inactivate RNase. The lysate is applied to provided Lysate Filter columns (Mini System) to remove cell debris and ensure complete cell lysis. RNA in chaotropic salt solutions binds to the glass fiber matrix of the columns. Following washing off of contaminants, the purified RNA is eluted by RNase-free water. ssRNA and dsRNA of > 200 bps to 1000's of bps in length are efficiently purified.

Applications

RT-PCR, cDNA synthesis, In Vitro Translation, Northern blotting, Micorarray prep

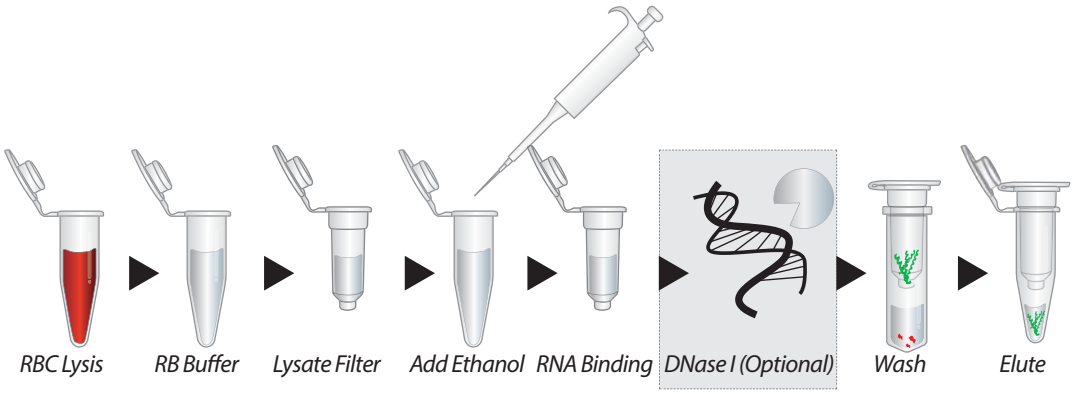
Quality Control

The quality of Total RNA Extraction Kit (Blood/Bacterial/Cultured Cells) is tested on a lot-to-lot basis. The kits are tested by isolation of total RNA from 300µl of fresh human whole blood. More than 1µg of total RNA was quantified with a spectrophotometer and checked by formaldehyde agarose gel analysis. Finally, RT-PCR was used to ensure the quality of total RNA.

Protocol

Sample (Protocols Included*):	Animal Tissues, Whole Blood/ Buffy Coat , Cultured Animal Cells, Gram -ve/+ve Bacteria
Genomic RNA Extraction Kits Mini	
Sample size:	106 Animal Cells, 300µl Whole Blood, 108 Bacterial Cells
Preparation time:	20 min
Yield:	< 30 µg
Genomic RNA Extraction Kits Maxi	
Sample size:	100-200mg Animal Tissue,107-108 Cultured Cell, 5ml Blood Sampleg
Preparation time:	60 min
Yield:	< 500 µg

*For certain protocols items such as DNase I, Lysozyme may need to be purchased separately.



Storage and Stability
This kit should be stored at room temperature.

Reference
Vogelstein, B., and Gillespie, D. (1979) Proc. Natl. Acad. Sci. USA 76, 615.

Additional Requirements(dependent on sample type):
Blood Protocol:
PBS,70% Ethanol and 96-100% Ethanol, Sterile, RNase -free pipet tips and microcentrifuge tube DNase I: DNase I (RNase free), RNase-free -Mercaptoethanol (b-ME) must be added to RB Buffer before use.

Bacterial Protocol:
Lysozyme Buffer:20 mg/ml lysoyme; 20 mM Tris-HCl; 2 mM EDTA; 1% Triton X-100; pH 8, Prepare the lysozyme buffer immediately prior to use.

Cat.No. YRB50	**Cat.No. YRB100**
50 mini preps / kit	100 mini preps / kit
RBC Lysis Buffer: 120 ml	RBC Lysis Buffer: 120ml x2
RB Buffer: 30ml	RB Buffer: 60ml
RT Buffer: 15 ml	RT Buffer: 30ml
R-W1 Buffer: 25 ml	R-W1Buffer: 50ml
R-Wash Buffer (concentrated): 25 ml	R-Wash Buffer (concentrated): 25ml
RNase-Free Water: 10ml	RNase-Free Water: 10ml
Filter Column Set: 50 sets (Comes with 2ml Collection Tube)	Filter Column Set: 100 sets (Comes with 2ml Collection Tube)
RB Column Set: 50 sets (Comes with 2ml Collection Tube)	RB Column Set: 100 sets (Comes with 2ml Collection Tube)
All components are RNase -Free treated RB Column Set is blister packed	All components are RNase -Free treated

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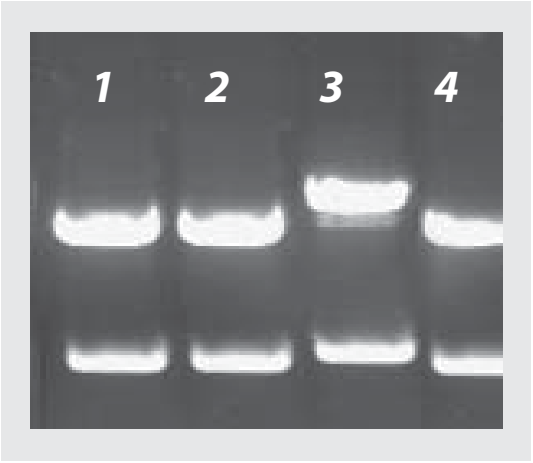
Performance



RBC Bioscience Labs

1: mouse liver (6µg)
2: kidney (6µg)
3: cos7 cells (6µg)
4: hela cells (6µg)

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