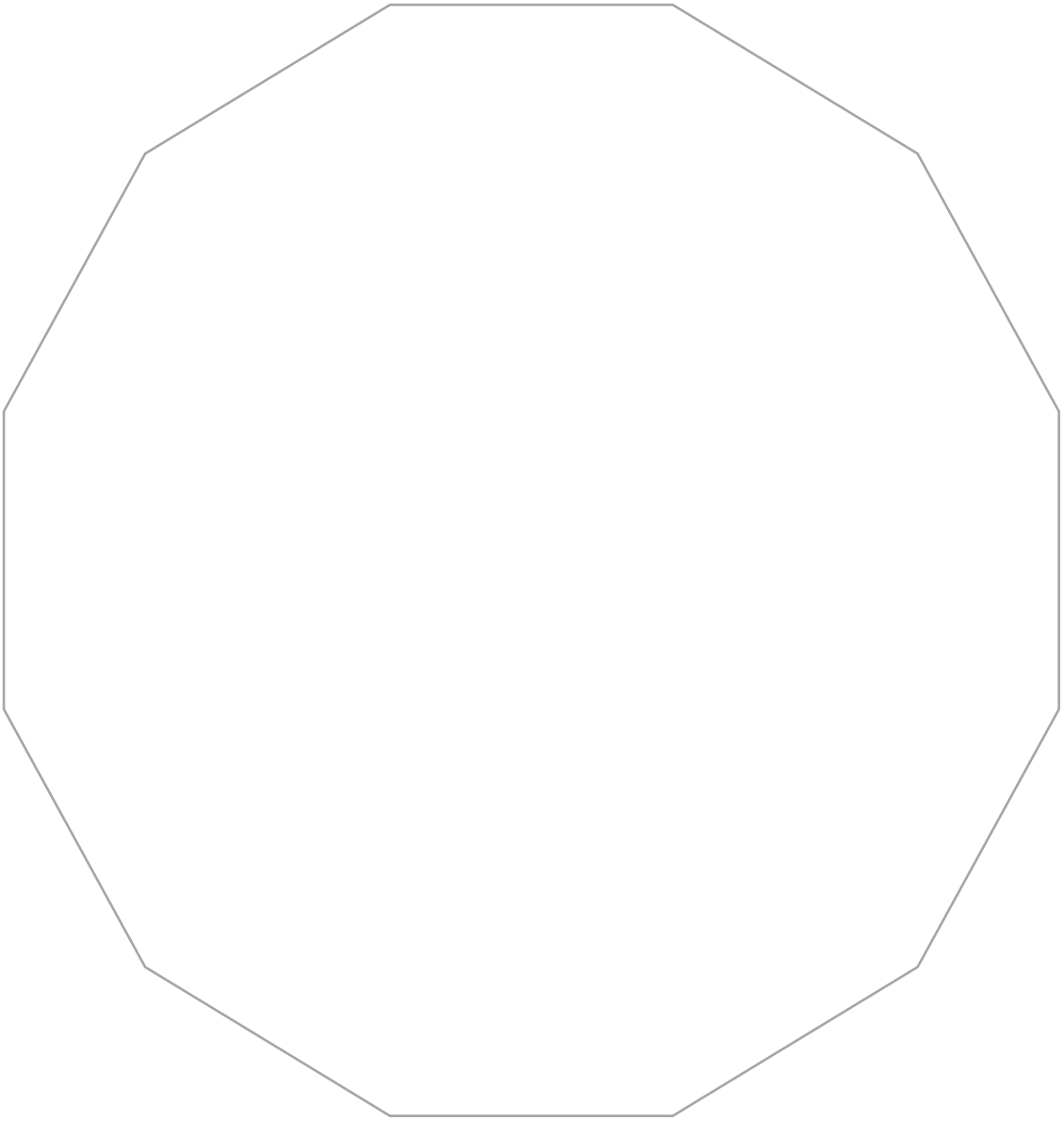
RNA PURIFICATION SYSTEM
PROTOCOL & TECHNICAL BULLETIN



BenevBio

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KIT CONTENTS

50 RXN Kit (RPS0001S):

ITEM	CATALOG #	50 RXN
RNA Purification Buffer	RPS0002	1 vial/25ml
Wash Buffer Concentrate	RPS0004	1 vial/6ml
NucleoPur™ Columns	RPS0006	50 columns
Collection Tubes	CT0050	50 tubes

PRECAUTIONS

THIS PRODUCT IS NOT INTENDED OR APPROVED FOR USE IN HUMANS OR VETERINARY ANIMALS. THE USE OF THIS PRODUCT IN A THERAPEUTIC SETTING IS HAZARDOUS AND MAY RESULT IN ILLNESS, INJURY AND/OR DEATH.

Please read these instructions carefully before using this system.

The reagents in this system have been formulated and tested to work exclusively with the BenevBio RNA Purification System. This system may not perform as described if any reagent or procedure is replaced and/or modified.

For research use only. Not for human or diagnostic use.

WARRANTY

BenevBio guarantees the performance of all products when used as directed for their intended purpose. Should any product fail to perform satisfactorily for any reason other than misuse, BenevBio's sole liability hereunder shall be limited to refund of the purchase price or, at the discretion of BenevBio, the replacement of all material that does not meet our specifications. BenevBio shall not be liable otherwise or for incidental or consequential damages including, but not limited to, the cost of handling. We reserve the right to change or modify any components to enhance the performance or design. The Buyer must give notice within thirty (30) days after receipt of material or shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

BenevBio CUSTOMER CARE INFORMATION

BenevBio
23263 Madero, Suite A
Mission Viejo, California 92691
USA

Sales/Customer Care: 888-43-BENEV
Direct: 949-457-2222
Fax: 949-457-2221

Internet: www.benevbio.com

STORAGE AND STABILITY

The system will perform as specified if stored dry at room temperature (20-25°C). Under these conditions the kit can be stored for up to 12 months without any decline in performance and/or quality.

ADDITIONAL ITEMS REQUIRED

1. Microcentrifuge capable of reaching 16,000 x g.
2. Adjustable pipettor.
3. Ethanol.
4. Microcentrifuge tubes.
5. A source of "UltraPure" water. Water used to elute samples must be deionized and free of trace organic contaminants.

Note: UltraPure water is available for purchase.

INTRODUCTION AND DESCRIPTION

The BenevBio RNA Purification System is designed to purify RNA from crude RNA preparations. The NucleoPur™ Columns efficiently purify and concentrate RNA samples of enzymatic reactions, removing RNases and organic solvents used in extraction processes. Samples are efficiently recovered and concentrated in as little as 6µl for sensitive applications including RT-PCR and microarray analysis. (Scalable elution volume)

QUICK PROTOCOL (ABRIDGED)

1. Add 4 volumes of RNA Purification Buffer to every volume of RNA sample.

2. Spin through NucleoPur™ Column for 30 seconds. (10,000 x g)

3. Add 200µl Wash Buffer to NucleoPur™ Column and spin for 30 seconds. (10,000 x g)
   Decant flow-through if necessary.

4. Repeat previous step and spin for 1 minute at 16,000 x g.

5. Place NucleoPur™ column in a new microcentrifuge tube.

6. Add 6-35µl H_2O, wait 30 seconds, then spin for 1 minute at top speed.

Note: All centrifugation steps should be performed at room temperature.

PROTOCOL

NOTE: Be sure to add an appropriate volume of ethanol (95-100%) to the Wash Buffer Concentration before use. See bottle label for volume.

1. Add 4 volumes of RNA Purification Buffer to every 1 volume of RNA sample and mix.
   - For samples <25µl, add 100µl RNA Purification Buffer.

2. Pipet mixture into a BenevBio NucleoPur™ Column with collection tube attached.

3. Centrifuge for 10 seconds. (10,000 x g)

4. Add 200µl of Wash Buffer to the column and centrifuge for 30 seconds at 10,000 x g. Discard flow-through if necessary.

5. Repeat step 4 and centrifuge for 1 minute at 16,000 x g.

6. Discard collection tube and place NucleoPur™ Column in a new microcentrifuge tube.

7. Add 6-35µl nuclease-free water directly to the column matrix. Wait for 30 seconds and centrifuge at top speed for 1 minute.

TROUBLESHOOTING

Low RNA yield:

Incorrect ratio of RNA Purification Buffer to RNA sample.	Make certain that 4 volumes of RNA Purification Buffer is added to every 1 volume of RNA sample. For samples under 25µls, add 100µls of RNA Purification Buffer.
Ethanol was not added to wash buffer.	Ethanol must be added to the Wash Buffer Concentrate. Add an appropriate volume of ethanol and repeat procedure.
Incorrect elution buffer.	RNA will be efficiently eluted with a low salt buffer such as TE pH 8.0 or water.
Centrifugation too slow.	Centrifuge at 16,000 x g.

RELATED PRODUCTS

ITEM	CATALOG #	SIZE
DNA free RNA System	DRS0001S	50 RXN

ORDERING INFORMATION

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