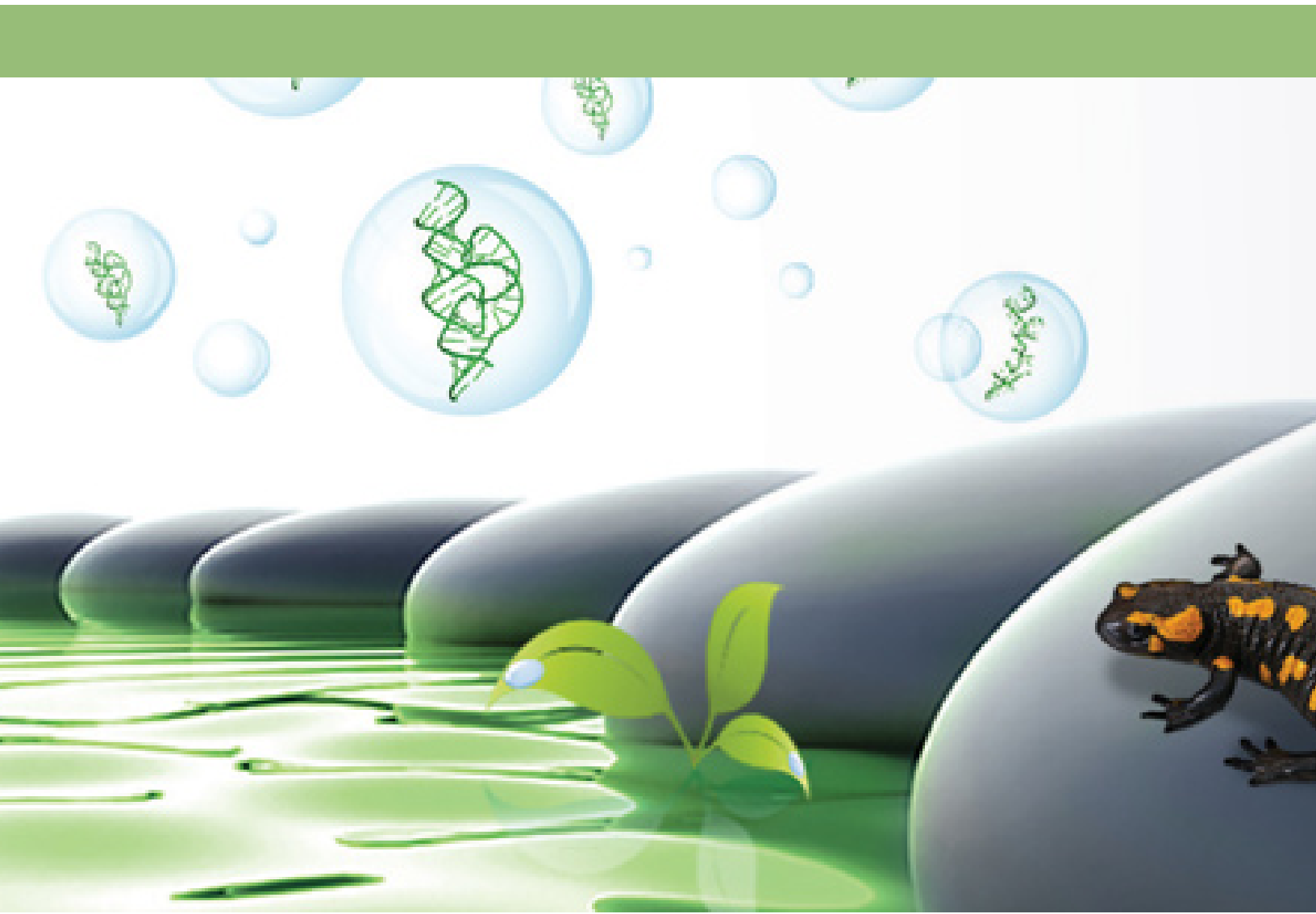




GeneBio
Systems, Inc.

RNA ISOLATION & PURIFICATION



HiPure Universal RNA Kit

- Isolate total RNA from 100mg lipid tissue, tissue, cell, plant, body fluids using columns & MagZol reagent
- Yield: 2 - 200µg (high output & can process large samples)
- Efficient DNA removal - one step RNA extraction can effectively remove genomic DNA
- High quality - one step RNA extraction reagent combined with silica gel column can contain the highest concentration
- Fast - several samples can be extracted in 30 minutes
- High applicability - samples including animals, plants, bacteria, cells, etc



CAT.#	PRODUCT
R413002	50 preps
R413003	250 preps

Supporting Data:

RNA extraction results for different clinical samples

Sample	RNA µg	Conc µg/µl	RIN	28S/18S
Heart vales 1	1.52	38	8.0	1.9
Heart vales 2	2.42	80	7.4	1.3
Mesentery 1	4.13	129	8.1	1.8
Mesentery 2	0.73	23	8.2	1.6
Leaf fat 1	0.93	32	8.3	1.5
Leaf fat 2	1.23	41	8.3	1.5
Liver 1	31	1203	8.3	1.5
Liver 2	42	1158	8.3	1.5
Kidney 1	12	470	8.9	1.8
Kidney 2	10.8	401	9.1	1.6
Intestine 1	8.7	134	8.7	1.6
Intestine 2	8.9	178	8.9	1.6

Use HiPure Universal RNA Kit (R4130) extracting total RNA from 6 different clinical tissue samples. Quantitate RNA by Thermo Nanodrop 2000 and analyze RNA integrity by Aligent 2100.

USES CHLOROFORM/PHENOL EXTRACTIONS



HiPure Total RNA Kit

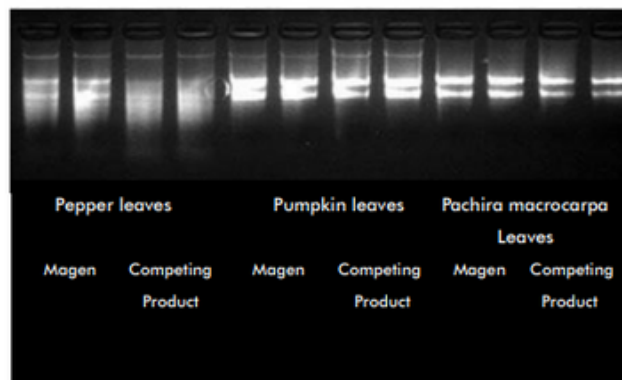
- Isolation total RNA from animal tissues, cells and simple plant tissues using one column
- Residual amounts of DNA remaining from small sample amounts of DNA can be removed using a convenient on-column DNase treatment
- Efficient removal of DNA - unique genomic DNA removal column without DNase treatment
- High quality - high purity total RNA can be directly used in sensitive downstream applications
- Fast - several samples can be extracted in 20 minutes by column method
- Safe - no phenol chloroform extraction required
- Sensitive - RNA can be recovered at the level of PG



CAT.#	PRODUCT
R4011	50 preps
R4012	250 preps

RNA extraction from plant samples:

A260/230	A260/280	Concentration $\mu\text{g}/\mu\text{l}$	Yield	Sample type	Sample amount	Company
2.24	1.97	554.65	55.47	Pepper	100mg	R4011
2.32	1.98	351.55	70.31			Competing Product A
1.79	1.96	561.68	56.17			
1.40	1.98	540.54	54.05	Pumpkin	100mg	R4011
2.40	1.98	386.00	77.20			Competing Product A
2.22	1.99	381.31	76.26			
1.58	2.00	354.87	70.97	Pachira macrocarpa	100mg	R4011
0.79	2.01	350.83	70.17			Competing Product A
2.36	1.97	503.14	50.31			
2.35	1.97	461.30	46.13	Pachira macrocarpa	100mg	R4011
1.41	2.00	388.18	38.82			Competing Product A
2.33	1.99	335.02	33.50			



DOES NOT USE CHLOROFORM/PHENOL EXTRACTIONS



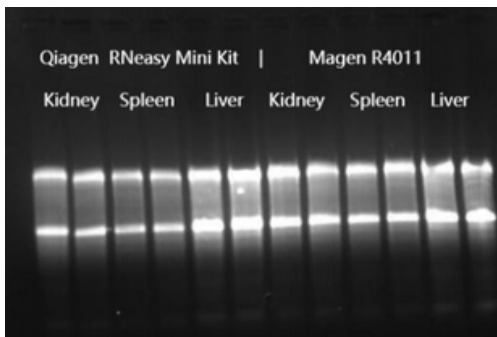
HiPure Total RNA Kit

CAT.#	PRODUCT
R4011	50 preps
R4012	250 preps



RNA extraction from tissue samples:

Sample	Sample amount	Concentration $\mu\text{g}/\mu\text{l}$	260/280	260/230	Yield μg	Company
Kidney	20 mg	0.422	2.11	2.07	56	R4011
		0.447	2.11	2.22	60	qiagen
		0.401	2.13	2.24	53	
		0.389	2.14	2.19	52	
Spleen	20 mg	0.387	2.09	2.06	52	R4011
		0.372	2.08	2.1	50	qiagen
		0.347	2.12	2.22	46	
		0.343	2.08	2.23	46	
Liver	20 mg	0.791	2.11	2.12	105	R4011
		0.750	2.06	2.23	100	qiagen
		0.609	2.1	2.23	81	
		0.643	2.16	2.25	86	



- In this experiment, Qiagen RNeasy Mini Kit was used as a control to verify the effectiveness and purity of RNA extraction from animal tissues using our reagent kit
- According to Nanodrop analysis, the RNA extracted by HiPure Total RNA Kit has A260/280 ranging from 2.0 to 2.1 and A260/230 ranging from 2.0 to 2.2, indicating that the purity of the RNA is up to standard.
- Compared to competitors, Magen R4011 is comparable to Qiagen products
- From the result of electrophoresis, the RNA bands are intact and do not degrade.

We love this RNA kit because the isolation protocol is very easy and saved me a lot of time. Plus the isolated RNA has a very high concentration (2000 ng/ μl), and the purification rate (260/230=1.9-2.1, 260/280=1.9-2.1). I recommend lab researchers try this kit out and you will love it too.

Jie Lin, York University (Kovinich Lab)



RNA Purification- Tissue/Cell RNA

HiPure FFPE RNA Kit

- Rapid RNA extraction for formalin-fixed, paraffin-embedded (FFPE) tissue and section samples
- Safe- no phenol-chloroform extraction or alcohol precipitation
- Silica gel column purification technology
- Entire extraction only takes 30 minutes (excluding digestion time)
- RNA extracted can be used for RT-PCR, Northern blot, in vitro translation and more.
- Yield: 20µg
- Sensitive - RNA can be recovered at the level of PG



CAT.#	PRODUCT
R1051	50 preps
R1052	100 preps

Sample	Sections	Company	Conc.(ng/µl)	Nanodrop Results			Qubit Results	
				A260/280	A260/230	Qubit(ng/µl)	Vol.(µl)	DNA(µg)
1	2	Magen	332.4	1.8	1.2	65.2	50	3.26
	2	Qiagen	123.1	1.7	1.3	30.5	50	1.53
2	2	Magen	454.8	2.0	1.6	274	50	13.7
	2	Qiagen	343	2.1	2.1	183	50	9.2
3	2	Magen	491.3	2.0	1.2	252	50	12.6
	2	Qiagen	448	1.9	1.1	300	50	15
4	2	Magen	214.6	2.0	1.9	56.8	50	2.8
	2	Qiagen	156.7	1.9	1.9	50.1	50	2.5
5	2	Magen	783.7	1.9	1.9	362	50	18.1
	2	Qiagen	655.3	1.9	2.2	315	50	15.8
6	2	Magen	140.8	1.9	1.6	67.4	50	3.4
	2	Qiagen	143.5	1.8	2.0	72.3	50	3.6

6 lung cancer FFPE samples use our kit and Qiagen extracting RNA. Test RNA by Nanodrop and Qubit. Results show that **our kit** gets **higher yield** than Qiagen kit by both OD and Qubit data. OD 260/280 and 260/230 data show the two kits have **same RNA purity**

General RNA Extraction Kit

- Isolate total RNA from wide range of sample types & amounts
- Samples are lysed and homogenized in guanidinium isothiocyanate (protects RNA from endogenous RNases)
- Purified RNA is free of impurities and enzyme inhibitors, and A260/280=1.8 - 2.0
- Stable yield
- Reliable performance of high-quality purified total RNA in downstream applications such as qPCR, Northern Blotting, nuclease protection assays, and more.



CAT.#	PRODUCT
R1051	50 preps
R1052	100 preps

To order, Call Toll-free 1(833)-LabShop | www.genebiosystems.com



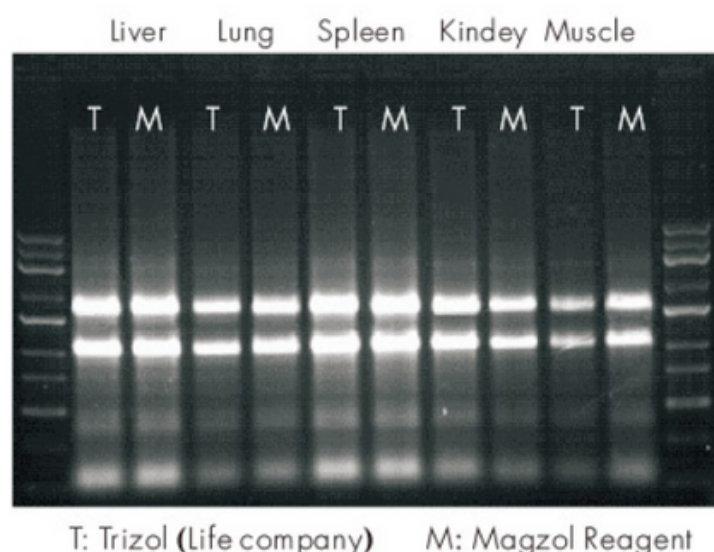
MagZol Reagent

- RNA isolation solvent
- Extensive suitability for various kinds of biological samples, including animals, plants, cultured cells, bacteria, etc
- High yield - efficient cleavage releases more RNA
- High purity - purified RNA is suitable for various downstream applications
- Flexible - sample amount can be adjusted according to demand
- High cost performance compared with similar products



CAT.#	PRODUCT
R1022	100 ml
R1022b	200 ml

MagZol Reagent Vs Trizol Reagent



Extracting RNA from 5 different tissues of mouse

Results show two reagents get similar RNA yield

MagZol LS Reagent

- Isolation RNA from various liquid samples by salting out method
- Purifies using acid phenol guanidine isothiocyanate
- Flexible - sample amount can be adjusted according to demand
- Most economical nucleic acid extraction technology



CAT.#	PRODUCT
RNI-07-01	100 ml
RNI-07-02	200 ml



HiPure Plant RNA Mini Kit

- Isolate total RNA from up to 150 mg plant using two columns (gDNA removed column without DNase treatment)
- Fast purification of high-quality RNA from plants, cells, tissues, and yeast using silica-membrane spin columns with a binding capacity of 100µg RNA
- Safe- no need for phenol/chloroform extractions and time consuming steps
- Short workflow enables RNA isolation with genomic DNA removal in less than 25 minutes by column method



CAT.#	PRODUCT
R415102	50 preps

HiPure Microbial RNA Kit

- Isolation total RNA from bacteria, yeast cells
- High-efficiency Magzol Reagent (one-step extraction reagent) and silica gel column purification technology to complete extraction of high purity total RNA in only 40 minutes
- Sample amount: Bacteria: $<10^9$; Yeast cells: $<2 \times 10^7$
- High recovery - RNA can be recovered at the level of PG
- Good repeatability - silica gel column purification technology can obtain ideal results each time
- Broad spectrum - various bacteria, including Gram-positive bacteria that are difficult to be lysed
- Sufficient components - contains wall breaking enzymes and glass beads

CAT.#	PRODUCT
R418202	50 preps



HiPure Universal miRNA Kit

- Isolation miRNA and other small RNA molecules (18nt), from cultured cells and various animal and human tissues, using MagZol reagent and column, with 40 minute extraction
- Sample amount: Eukaryotic culture cells: $\leq 10^7$, Animal tissue: $<100\text{mg}$, Yeast culture cells: $<5 \times 10^7$, Bacteria: $<10^9$
- High concentration - efficiently remove macromolecular RNA, enrich small RNA and improve sensitivity



CAT.#	PRODUCT
R431002	50 preps

HiPure Cell miRNA Kit

- Isolation total RNA and miRNA from cell and tissue without MagZol reagent
- Sample amount: Cells: $\leq 5 \times 10^6$, Animal tissue: $<10\text{mg}$
- Fast - several samples can be extracted in 4- minutes
- High concentration - efficiently remove macromolecular RNA, enrich small RNA and improve sensitivity
- Safe - no phenol chloroform extraction and no use of Trizol reagent



CAT.#	PRODUCT
R431102	50 preps

HiPure Serum miRNA Kit

- Isolation total RNA and miRNA from 0.3-0.9ml serum and plasma without the need to resort to phenol/chloroform extraction or a time consuming proteinase digest



CAT.#	PRODUCT
R431402	50 preps



HiPure Cell Pathogen DNA/RNA Kit (NGS)

- Extract pathogen RNA/DNA from whole blood, body fluid, serum, plasma, sputum, immersion solution, tissue homogenate supernatant, etc.
- Purified RNA/DNA is ready for in vitro detection such as real-time PCR, biochip analysis, NGS and more.
- Sample amount: 200µl
- Fast- column purification, several samples can be finished in 30 minutes
- Safe - no phenol chloroform extraction required
- Sensitive - DNA/RNA can be recovered at the level of PG



CAT.#	PRODUCT
R417002	50 preps
R417003	250 preps

HiPure Viral RNA Kit

- Extract viral RNA from 140µl non-cell/low cell content biological samples such as body fluid, serum, plasma, urine, immersion solution, tissue homogenate supernatant, etc.
- Fast - several samples can be extracted in 20 minutes by column method
- Safe - no phenol chloroform extraction required
- Sensitive - RNA can be recovered at the level of PG
- High yield - carrier RNA contained in the product maximize the recovery of trace nucleic acid



CAT.#	PRODUCT
R417102	50 preps

HiPure Protein/DNA/RNA Kit

- Co-isolation DNA/RNA/ protein from a single sample (cells, soft tissue, plant sample)
- Sample amount: Cultured cells: $< 10^7$; Animal tissue: ≤ 20 mg; Plant samples: ≤ 150 mg; Yeast cells: $2 \times 10^6 - 5 \times 10^7$
- Fast - column method can complete the extraction of several samples in 30 minutes
- Safe - no phenol chloroform extraction required



CAT.#	PRODUCT
R521102	50 preps



RNA Isolation Reagents

Proteinase K Lyphollized

- Specific Activity: 40 U/mg protein
- Source: Tritirachium album limber
- Molecular Weight: 29,730
- used in isolating mRNA, genomic DNA and digesting unwanted proteins during DNA and RNA preparations from tissues and cells

CAT.#	PRODUCT
N9016	100 mg
N9017	1 g



RNASafer Reagent

- Safe tissue RNA protective agent
- Quickly penetrates into the cell, inactivates nuclease and protects RNA from degradation
- Suitable for preserving fresh biological samples, such as animal tissues, plant tissues, cultured cells, etc.

CAT.#	PRODUCT
P8310-02	500 ml



RNASafer LS Reagent

- RNA protective agent designed for liquid samples (blood, saliva, and culture medium)
- Contains cationic surfactants, which can quickly and efficiently cleave cells to form stable electro neutral complexes and protect RNA from degradation

CAT.#	PRODUCT
P8340 -02	500 ml





GeneBio
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Specialists in Economical Quality Lab Supplies



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