

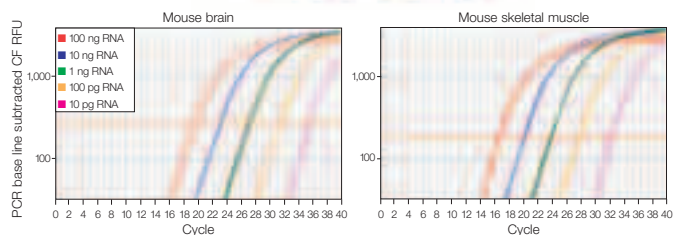


### The right tool for those challenging samples

The Aurum™ total RNA fatty and fibrous tissue kit lets you focus on answering important scientific questions, instead of optimizing sample preparation.

- Quickly isolate up to 100 µg of high-quality total RNA from fatty or fibrous tissues or RNase-rich samples\*
- DNA- and phenol-free RNA is ready to use in downstream applications, including real-time RT-PCR and microarray analysis
- Easy-to-use protocol in a spin- or vacuum-compatible format
- Kit includes RNase-free reagents and plasticware, and DNase I for removal of genomic DNA

\* Also compatible with most animal and plant tissues, cultured cells, yeast, and bacteria.



**Real-time RT-PCR with total RNA isolated using the Aurum total RNA fatty and fibrous tissue kit.** RNA was isolated from 50 mg of mouse brain and skeletal muscle, then reverse transcribed using the iScript™ cDNA synthesis kit. cDNA was amplified using iQ™ SYBR® Green supermix and β-actin primers and analyzed with the MyiQ™ single-color real-time PCR detection system.

## RNA From Difficult-to-Process Samples

The Aurum total RNA fatty and fibrous tissue kit meets the stringent requirements of all research applications, isolating high-quality, DNA- and phenol-free total RNA from samples that are rich in lipid, protein, DNA, and nucleases. Such samples often pose challenges during processing and require special protocols to maximize RNA yield and quality. The Aurum total RNA fatty and fibrous tissue kit utilizes PureZOL™ reagent for efficient disruption and lysis of samples, followed by a convenient purification protocol. The kit is also compatible with most animal and plant tissues, cultured cells, yeast, and bacteria. A streamlined protocol, which includes shortened digest times and vacuum compatibility, makes this isolation kit the ideal solution for every laboratory.

High yields of total RNA can be obtained from a wide range of sample types and amounts. Up to 100 mg of animal and plant tissue can be processed with this kit without the risk of clogging the Aurum RNA binding membrane or compromising the RNA quality and yield. Samples purified using the Aurum total RNA fatty and fibrous tissue kit are ready for use in any downstream application, without any manipulation, such as ethanol precipitation.

## RNA Suitable for All Downstream Applications

Isolation of total RNA for gene expression studies requires special precautions. For most applications, the isolated RNA must be largely intact and free from contaminating genomic DNA to ensure confident data analysis and interpretation. The Aurum total RNA fatty and fibrous tissue kit minimizes the risk of introducing exogenous RNases by including RNase-free plasticware and reagents. The kit also includes lyophilized DNase I for on-column removal of genomic DNA. The resulting RNA is suitable for all sensitive downstream applications, including real-time RT-PCR.

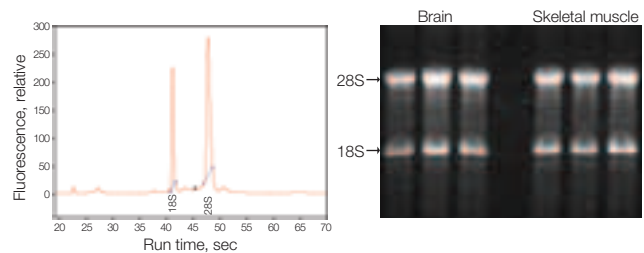
For more information, visit us on the Web at [www.bio-rad.com/products/aurum/](http://www.bio-rad.com/products/aurum/)

### Specifications

Format	Mini column
Method	Spin- or vacuum-mediated silica binding
Number of preps	50
Maximum binding capacity	>100 µg total RNA per column
RNA size distribution	>200 nucleotides
Purity	A <sub>260</sub> /A <sub>280</sub> of 1.9–2.1
Maximum starting material amounts	100 mg animal or plant tissues 50 mg filamentous fungi 1 x 10 <sup>7</sup> cultured mammalian cells 2.4 x 10 <sup>9</sup> bacterial cells 3 x 10 <sup>7</sup> yeast cells
Preparation time	<1 hr without DNase I digest 1.5 hr with DNase I digest
Stability of reagents	6 months

Starting Material (Amount Used)	Yield, µg*	Starting Material (Amount Used)	Yield, µg*
Fatty animal tissue (100 mg)		Filamentous fungi (50 mg)	
Brain	96	<i>Aspergillus niger</i>	12
Breast	58	Cultured cells (1 x 10 <sup>7</sup> )	
Adipose	14	293-H	145
Fibrous animal tissue (100 mg)		Bacterial cells (2.4 x 10 <sup>9</sup> )	
Heart	85	<i>Escherichia coli</i>	30
Cartilage	54	Yeast cells (3 x 10 <sup>7</sup> )	
Skin	63	<i>Saccharomyces cerevisiae</i>	64
Plant tissue (100 mg)			
Potato	91		

\* Yield figures are representative of a minimum of 20 mini column preps performed in both vacuum and spin formats.



**Analysis of high-quality RNA isolated with the Aurum total RNA fatty and fibrous tissue kit.** Electropherogram of high-quality mouse brain total RNA analyzed on the Experion™ automated electrophoresis system using the Experion RNA StdSens kit (left) and by denaturing agarose gel electrophoresis of RNA samples (4 µg) from mouse brain and skeletal muscle (right).

### Ordering Information

Catalog #	Description
732-6830	Aurum Total RNA Fatty and Fibrous Tissue Kit, 50 preps, includes 50 ml PureZOL RNA isolation reagent, 50 RNA-binding columns, 50 capless collection tubes (2.0 ml), 2 x 50 capped sample tubes (2.0 ml), 50 capped sample tubes (1.5 ml), 1 vial lyophilized DNase I, RNase-free reagents, protocol overview, instructions

### Related Products

732-6470	Aurum Vacuum Manifold, includes column adaptor plate, 4 replacement luer caps, A stage and B stage, waste collection tray, vacuum regulator and gauge, tubing, protocol overview, instructions
732-6890	PureZOL RNA Isolation Reagent, 100 ml, for up to 100 preps, for cultured cells, animal and plant tissues, bacteria and yeast (50–100 mg animal or plant tissue, 0.5 million to 10 million cells)

Practice of the patented polymerase chain reaction (PCR) process requires a license.



**Bio-Rad  
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