

# RNA Guide

**REAL**

**MOLECULAR BIOLOGY**

Nucleic acid To purify	Sample Volume Sample	Isolation Method	Product Reference	When to use	Advantages/Observations
Total RNA	Tissues: 5 to 100 mg Cells: 100 to 10x10 <sup>6</sup>	Buffer Solutions	<b>REALTOTAL RNA from Tissues and Cells Kit RBMER01</b>	The method can be scaled. Rapid and very economical.	Toxic reagents are not used.
			<b>REALTOTAL RNA from Tissues and Cells Kit "STAR" RBMER02</b>	Specially designed for RT-PCR. Includes all the necessary reagents to remove contaminant DNA.	Toxic reagents are not used.
	Tissues: 5 to 30 mg Cells: 10 to 5x10 <sup>6</sup>	Silica Membrane Column	<b>REALTOTAL RNA SPIN PLUS RBMER11</b>	High quality RNA is obtained.	DNA-free total RNA, elimination contaminant DNA is made on the column.
	Bacteria: 1 ml ; 10 <sup>9</sup> Yeast: 1ml ; 10 <sup>7</sup>	Buffer Solutions	<b>REALTOTAL RNA from Bacteria and Yeast Kit RBMER03</b>	Rapid and very economical.	Toxic reagents are not used.
			<b>REALTOTAL RNA from Bacteria and Yeast Kit "STAR" RBMER04</b>	Specially designed for RT-PCR. Includes all the necessary reagents to remove contaminant DNA.	Toxic reagents are not used.
	Blood: 300 µl	Silica Membrane Column	<b>REALTOTAL RNA SPIN BLOOD RBMER12</b>	High quality RNA is obtained. DNA-free total RNA .	It contains a Stabilizing Solution which allows a safe transport from the collecting place to the laboratory
	Plants and Fungi: <100 mg		<b>REALTOTAL RNA SPIN Plants and Fungi RBMER13</b>	High quality RNA is obtained. DNA-free total RNA .	It contains a PVP solution to remove carbohydrates and polyphenols and 2 different Lysis Solutions.
	Biological fluids (serum, plasma, saliva, etc), bacteria, yeast, paraffin-embedded tissue and reactions cleaning.	Spin Column Chromatography	<b>REALTOTAL RNA SPIN PLUS RBMER11</b>	High quality RNA is obtained. DNA-free total RNA .	Total RNA prepared can be used in applications such as RT-PCR, Northern, primer extension, array technology and Rnase protection.
	Cultured animal cells, tissue samples, blood, bacteria, yeast, fungi, biological fluids and plants.		<b>ARNzol Kit RBMER15</b>	The kit purifies all sizes of RNA, from large mRNA and ribosomal RNA down to microRNA (miRNA) and small interfering RNA (siRNA).	Rapid and very economical method. Do not eliminate the genomic DNA.
	total RNA from all types of samples	Enzymatic and resin	<b>REALSTAR RBMER10</b>	To remove contaminant DNA from RNA samples and for removing the DNase after the treatment.	Fast and easy method. The DNase removal step takes place in just 3 minutes.
micro RNA	Cultured animal cells, tissue samples, blood, bacteria, yeast, fungi, biological fluids and plants.	Silica Membrane Column and Spin Column Chromatography	<b>REALTOTAL microRNA Kit RBMER14</b>	Rapid and efficient method for the isolation and purification of small RNA molecules (<200 nt). These small RNAs include regulatory RNA molecules such as microRNA (miRNA) and short interfering RNA (siRNA).	Most commercial RNA purification kits do not recover RNA molecules smaller than < 200 nucleotides, using an approach consisting of two sequential filtrations with different ethanol concentrations, <b>an RNA fraction highly enriched in RNA species &lt; 200 nucleotides can be obtained</b> .
Genomic DNA and total RNA	Cultured animal cells, tissue samples, blood, bacteria, yeast, fungi, biological fluids and plants.		<b>REALPURE SPIN DNA/RNA Kit RBMER16</b>	Rapid method for the isolation and purification <b>genomic DNA and total RNA simultaneously</b> from a single sample.	Analysis will be more reliable since the RNA and DNA are derived from the same sample. The kit purifies all sizes of RNA, from large mRNA and ribosomal RNA down to microRNA and small interfering RNA