MRC a corporation "run by scientists for scientists"
Molecular Research Center, Inc.

RNAzol® RT

BREAKTHROUGH IN RNA ISOLATION

One-Step Method without Phase Separation

A Generation Gap between RNAzol and TRIzol……

See Product Performance…

View Product Protocol…

Product Description

RNAzol®RT is the most effective reagent for isolation of total RNA and small RNA from samples of human, animal, plant, bacterial and viral origin. This patent-pending reagent provides higher yield and quality of isolated RNA than previous reagents based on the single-step method. **RNAzol®RT** isolates pure and undegraded RNA that is ready for RT-PCR without DNase treatment. **RNAzol®RT** separates RNA from other molecules in a single-step based on the interaction of phenol and guanidine with cellular components. No chloroform-induced phase separation is necessary to obtain pure RNA. Supplementing **RNAzol®RT** with water makes DNA, proteins and polysaccharides insoluble.

A biological sample is homogenized or lysed in **RNAzol®RT.** DNA, proteins, polysaccharides and other molecules are precipitated from the homogenate/lysate by the addition of water and removed by centrifugation. The pure RNA is isolated from the resulting supernatant by ethanol precipitation, followed by washing and solubilization.

- The isolation procedure can be completed in less than one hour. The isolated RNA is ready for use in RT-PCR, qRT-PCR, microarrays, poly A+ selection, northern blotting, RNase protection assay and other molecular biology applications.
- **RNAzol®RT** isolates total RNA, with mRNA and small RNA as separate fractions. Small RNA contains RNA <200 bases, including 10 - 15 base miRNA.
- In addition, **RNAzol®RT** allows for the simultaneous isolation of RNA and DNA.
- The **RNAzol®RT** procedure is performed at room temperature, including centrifugation.
- Due to lack of co-isolation of impurities, the **RNAzol®RT** procedure yields RNA pellets that are significantly smaller than pellets obtained from samples processed with previous single-step reagents.

STABILITY/STORAGE: **RNAzol®RT** is stable when stored at room temperature for at least two years from date of purchase.