

Using the ReliaPrep™ RNA Cell Miniprep System to Isolate RNA From tissue lysates in TRIzol®.

Isolate high quality, amplifiable RNA from tissues homogenized in phenol and guanidine isothiocyanate based products such as TRIzol® using ReliaPrep™. No need for phase separation or additional organic solvents.

Kit: Reliaprep™ RNA Cell Miniprep System

Analyses: GoTaq® RT-qPCR, QuantiFluor® quantitation

Sample Type(s): mammalian tissue

Input: up to 500µl of TRIzol® or other phenol and guanidine isothiocyanate based lysate.

Materials Required:

- Reliaprep™ RNA Cell Miniprep System (Cat. #Z6011)

Protocol:

1. Prepare tissue lysate in TRIzol® as indicated in the TRIzol® Reagent technical manual up to the point where phase separation would be performed.
2. Add 35µl of isopropanol per 100µl of lysate.
3. Mix by vortexing for 5 seconds.
4. Transfer up to 500µl of lysate to a ReliaPrep™ Minicolumn and centrifuge at 12,000-14,000 x g for 30 seconds at room temperature.
5. Continue with ReliaPrep™ Protocol as described in TM starting with step 8.

This protocol was developed by Promega Applications Scientists and is intended for research use only.

The user is responsible for determining its suitability in the user's application.

For further information, please contact techserv@promega.com

Results:

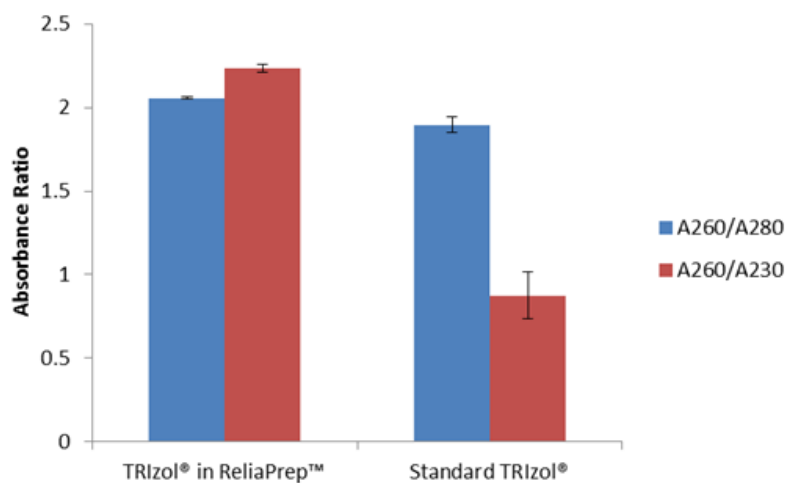


Figure 1: Purity Ratios measured from RNA isolated with the ReliaPrep™ RNA Cell Miniprep System or the standard TRIzol® Reagent protocol

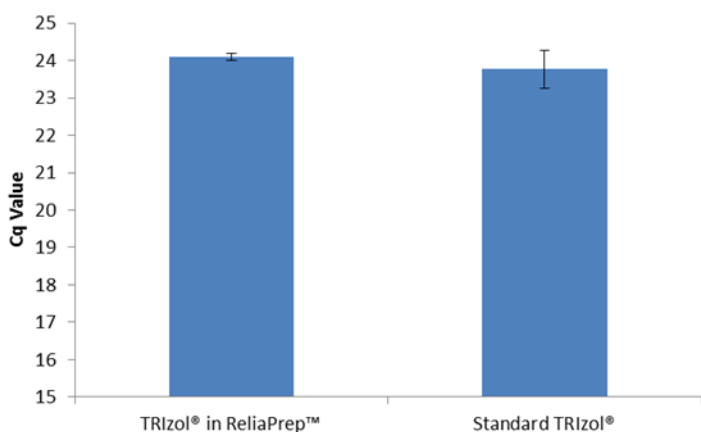


Figure 2: Cq values from RT-qPCR with RNA isolated from 500µl of TRIzol® tissue lysate containing 10mg of mouse liver with the ReliaPrep™ RNA Cell Miniprep System or the standard TRIzol® Reagent protocol. RT-qPCR was run using 2.5µl of RNA in the GoTaq® Probe 1-Step RT-qPCR System.