

**Cell RNA Isolation Kit (Catalog# TBS6001)****Fast One Step Method****DESCRIPTION**

Isolation of high quality RNA is an important first step in gene expression studies such as RT-PCR, qRT-PCR and array analysis. TBS Cell RNA Isolation Kit is designed to isolate total RNA from cultured cells for 200 samples. This kit can significantly improve the quantity and quality of RNA.

**APPLICATIONS**

**Direct Assays:** total RNA isolation from cultured cells.

**KEY FEATURES**

**Simple and convenient:** There is no special equipment need.

**High yield rate:** This method gets higher yield rate of RNA than spin column method.

**Versatility:** multiple RNAs include microRNA.

**KIT CONTENTS (200 samples)**

**Reagent:** 2 x 100ml, RNase-free Water 15ml

**Storage conditions.** The kit is shipped at room temperature. Store the reagent at 4°C. Shelf life: 12 months after receipt.

**REQUIRED MATERIALS NOT PROVIDED WITH THE KIT**

Chloroform, Isopropanol, Ethanol, 1.5 ml tubes

**PROCEDURES**

1. Take cells in the microtube and remove the culture medium through brief centrifuge.
2. Add 1ml RNA Isolation Reagent and lysate the cells.
3. Add 0.2ml chloroform and shake vigorously or vortex for 10s
4. Cool the samples on ice for 5 min. Centrifuge for 15 min at 12,000g at 4°C.
5. Transfer carefully the upper aqueous phase (0.5ml) to new tube
6. Add 0.5ml (1 vol.) of 100% isopropanol, mix well and then incubate at -20°C for at least 30 min.
7. Centrifuge at 12,000g at 4°C for 10 min to precipitate the RNA, Discard the supernatant carefully.
8. Wash the RNA pellet with 1ml of 75% ethanol, centrifuge at 10,000g at 4°C for 5min. Discard the supernatant and repeat wash once.
9. Air dry for 5-10 min.
10. Dissolve the RNA pellet in 100-200 µl of RNase-free water.

11. Assess concentration and quality of RNA with spectrophotometric readings at wavelengths of 260nm and 280nm. Store the RNA samples at -80°C.

**REFERENCES**

1. Chomczynski P & Sacchi N. Single-step method of RNA isolation by acid guanidinium thiocyanate-phenol-chloroform extraction. *Anal. Biochem.* 162: 156-159 (1987).
2. Chomczynski P & Sacchi N. The single-step method of RNA isolation by acid guanidinium thiocyanate-phenol-chloroform extraction: twenty-something years on. *Nature Protocols*, 1: 581-585(2006)

**RELATED PRODUCTS:**

Tissue RNA Isolation Kit (catalog# TBS6003)  
Blood RNA Isolation Kit (catalog# TBS6002)  
Acid Precipitation Enhancer (TBS6010)  
Mouse Tail DNA Extraction(TBS6005)  
Tissue DNA Extraction(TBS6006)  
Blood RNA Isolation Kit (TBS6002)  
Nucleic Cell DNA Extraction Kit(TBS6007)  
2x qPCR Hot Start Super Mix(TBS4001)  
2x PCR Hot Start Master Mix(TBS4002)  
2x Genotyping PCR Ready Mix(TBS4003)  
2x PCR Red Mix(TBS4004)  
Reverse Transcription Reaction Kit (TBS4006)

**This product is for *in vitro* research use only and is not intended for use in humans or animals in therapeutic or diagnostic procedures.**