NGzol LS total RNA Blood (liquid sample) isolation Reagent

Code No.：

NG301S 50 ml

NG301M 100 ml

Storage：Store at RT for up to one years. Nevertheless, for best results, we recommend storing it in an environment of 2~8 ℃.

Important Note：

This product contains phenol, which is toxic and corrosive. It can lead to poisoning, Burns, and other bodily injuries if touched. When using this product should wear protective articles, such as protective clothing, gloves, eye masks and so on. Please flush immediately with a large amount of water and proceed to hospital for treatment if careless contact.

Introduction：

NGzol LS total RNA Blood (liquid sample) isolation Reagent is a wide range use reagent for total RNA extraction. The color of reagent is bright, the operation is fast and convenient. Reagent can be used to extract total RNA from liquid sample derived from humans, animals, plants, yeast, bacteria, and viruses. No matter a small amount of tissues (50-100 mg) and cells (5×10^6) or a large amount of tissues (≥1 g) and cells ($>10^7$), all have good extraction results by using this method. The extracted total RNA of NGzol LS total RNA Blood (liquid sample) isolation Reagent has good integrity and is free of DNA and protein contamination. It can be used in in RT-PCR, Real-time RT-PCR, Northern Blot, Dot Blot, in vitro translation, etc.

Safety Information:

1. Samples homogenized with NGzol LS can be placed at -70 ℃ for more than one month without immediate addition of chloroform. RNA precipitates in 75% ethanol could be stored for one week at 2-8 ℃ and for one year at -20 ℃.
2. Required reagents: chloroform, isopropyl alcohol (for new or RNA extraction), 75% ethanol (prepared with DEPC-treated water), RNase free water or DEPC-treated water.

Operation Procedure:

1. Preparing samples.
   NGzol LS is recommended for use with whole blood or Liquid samples. NGzol LS is used for Liquid Sample. Add 0.75 ml NGZOL LS for per 250 μl sample.
2. The homogenate sample was subjected to severe shaking and left at room temperature for 5 min to allow complete dissociation of the nucleosome.

Optional step: Centrifuge the sample at 12,000 rpm for 10 min at 4 ℃. Transfer the supernatant to a fresh micro-centrifuge tube.

Note: When preparing samples with high content of fat, proteins, polysaccharides, or extracellular material (e.g., muscle, fat tissue, or tuberous plant material), an additional centrifugation may be required to remove insoluble material from the samples. RNA remains in the upper aqueous phase after centrifugation.

3. Add 200 μl of chloroform. Vortex for 15 sec. Incubate for 2-3 min at room temperature.
4. Centrifuge at 12,000 rpm for 10-15 min at 4 ℃. The mixture separates into three phase, a lower yellow phenol-chloroform phase, an interphase, and a colorless upper aqueous phase. RNA remains exclusively in the

aqueous phase. Pipette the aqueous phase(about 600 μl) out into a new tube.

5. Add Isopropanol of equal volume of aqueous phase, fully mixed with immediately turn up and down, Incubate for 10-15 min at room temperature. RNA sediment are usually not visible, but after centrifugation form gelatinous sediment on the side and bottom of the tube.
6. Centrifuge at 12,000 rpm for 10-15 min at 4 ℃, discard the supernatant.
7. Washed the sediment with 1 ml 75% ethanol, centrifuge at 12,000 rpm for 2-3 min at 4 ℃, discard the supernatant.
8. Repeat step7.
9. Dry by letting the RNA sediment at room temperature 3-5 min or centrifuging at 12,000 rpm for 1-2 min at 4 ℃, then use the gun to suck out the liquid.
10. Dissolve with 30-100 μl RNase free water. Stored at -70 ℃ after completely dissolved.

Note：RNA sediment should not be too dry to dissolve.