

RNA Clean-Up and Concentration 96-Well Kit

Norgen's RNA Clean-Up and Concentration 96-Well Kit provides a rapid method for the purification, clean-up and concentration of up to 50 µg of RNA isolated using different methods including phenol/guanidine-based protocols, and from various upstream enzymatic reactions such as DNase treatment, labeling and *in vitro* transcription. The kit purifies all sizes of RNA, from large mRNA and ribosomal RNA down to microRNA (miRNA) and small interfering RNA (siRNA). The RNA is preferentially purified from other reaction components such as proteins, RNases and nucleotides, without the use of phenol or chloroform. The purified RNA is of the highest integrity, and can be used in a number of downstream applications including end-point or quantitative reverse transcription PCR, Northern blotting, RNase protection and primer extension, and expression array assays. Purification is based on 96-well column chromatography using Norgen's proprietary resin as the separation matrix. The RNA is preferentially purified from other cellular components such as proteins without the use of phenol or chloroform.



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| Kit Specifications | | | |
|-------------------------------------|--------------|-----------------------------------|------------|
| Binding Capacity Per Well | 50 µg | Size of RNA Purified | All Sizes |
| Maximum Amount of Starting Material | 50 µg of RNA | Average Recovery | ≥ 90% |
| Minimum Elution Volume | 75 µL | Time to Complete 10 Purifications | 30 minutes |

RNA Clean-Up and Concentration 96-Well Kit Benefits

| | |
|---|---|
| Efficient clean-up from various enzymatic reactions | RNA clean-up from upstream enzymatic applications such as labeling, DNase treatment and <i>in vitro</i> transcription. Remove proteins, RNases, DNases, nucleotides, etc. |
| Clean-up and concentration of RNA isolated by different methods | RNA that has been isolated using various methods, including phenol-chloroform extractions or alcohol precipitations, can be processed with this kit. |
| Fast and easy processing | Rapid spin-column format allows for the processing of 10 samples in 20 minutes. |
| No phenol:chloroform extractions | Norgen's RNA Clean-Up and Concentration Micro Kit purifies RNA without the use of harmful chemicals such as phenol or chloroform. |
| Isolate all small RNA molecules | All small RNA species can be isolated including miRNA, siRNA, tRNA, and 5S rRNA. |
| Recovered RNA is suitable for downstream applications | Purified RNA can be used in a number of downstream applications including end-point or quantitative reverse transcription PCR, Northern blotting, RNase protection and primer extension, and expression array analysis. |

RNA Clean-Up and Concentration 96-Well Kit

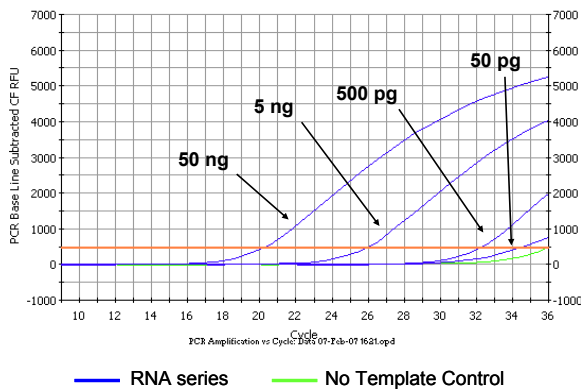


Figure 1. Concentration and Detection of Increasing Amounts of HeLa RNA. Increasing amounts of HeLa RNA in 50 μ L input volumes were concentrated to 20 μ L using Norgen's RNA Clean-Up and Concentration Kit. A 10 μ L aliquot of the purified RNA was then used as the template in a qRT-PCR reaction to detect the S14 gene. The amounts indicated on the graph correspond to the amount of RNA that was used as the input for the qRT-PCR reaction, demonstrating the consistent performance of the kit even in the picogram range.

RNA Clean-Up and Concentration 96-Well Kit Contents

1. Buffer RL
2. Wash Solution A
3. Elution Solution A
4. 96-Well Plate
5. Adhesive Tape
6. 96-Well Collection Plate
7. 96-Well Elution Plate
8. Product Insert

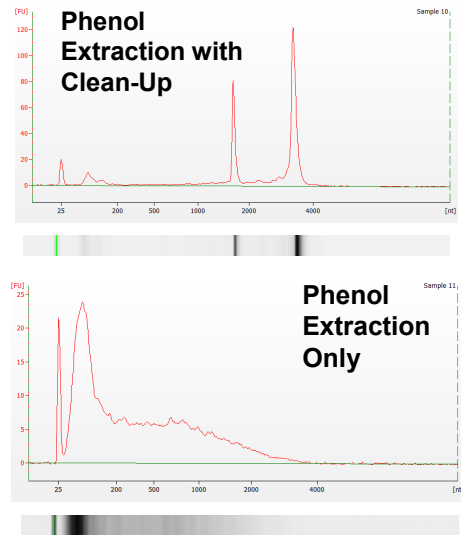


Figure 2. Effective Clean-Up to Produce High Quality Total RNA Compatible to Bioanalyzer Analysis.

Total RNA was isolated from HeLa cells using a competitor's phenol-based RNA extraction reagent. The resulting RNA was then purified using Norgen's RNA Clean-Up and Concentration Kit. Resolution of 1 μ L of the 50 μ L purified RNA on an Agilent RNA Nano 6000 Chip showed that without clean-up, the RNA sample isolated using the phenol-based RNA extraction reagent only resolved poorly on a bioanalyzer. In contrast, RNA extracted with the phenol-based RNA extraction reagent followed by clean-up by Norgen's RNA Clean-Up and Concentration Kit resolved properly on the bioanalyzer showing excellent quality.

Storage Conditions

All solutions should be kept tightly sealed and stored at room temperature. These reagents should remain stable for at least 2 years in their unopened containers.

Shipping Conditions

The RNA Clean-Up and Concentration Micro Kit is shipped at room temperature.

| Cat # | Description | Quantity |
|-------|--|--------------------|
| 25100 | RNA Clean-Up and Concentration 96-Well Kit | 2 x 96 well plates |