

RNA/DNA/Protein Purification 96-Well Kit

Norgen's RNA/DNA/Protein Purification 96-Well Kit provides a rapid method for the high throughput isolation and purification of total RNA, genomic DNA and proteins simultaneously from a single sample of cultured animal cells, small tissue samples, blood, bacteria, yeast, fungi or plants. This kit is ideal for researchers who are interested in studying the genome, proteome and transcriptome of a single sample, such as for studies of microRNA profiling, gene expression including gene silencing experiments or mRNA knockdowns, studies involving biomarker discovery, and for characterization of cultured cell lines. Norgen's RNA/DNA/Protein Purification 96-Well Kit is especially useful for researchers who are isolating macromolecules from precious, difficult to obtain or small samples such as biopsy materials or single foci from cell cultures, as it eliminates the need to fractionate the sample. Fur-



thermore, analysis will be more reliable since the RNA, DNA and proteins are derived from the same sample, thereby eliminating inconsistent results. The purified macromolecules are of the highest purity and can be used in a number of different downstream applications

Kit Specifications			
Binding Capacity Per Well	50 µg for RNA 20 µg for DNA 150 µg for Protein	Average Yield* Liver (5 mg)	12.5 µg RNA 2 µg DNA 55 µg protein
Size of RNA Purified	All sizes, including small RNA	Time to Complete 10 Purifications	35 minutes
Size of DNA Purified	≥ 30 kb		

RNA/DNA/Protein Purification Kit Benefits

Complete column purification	The RNA, DNA and proteins are all column purified using the same column.
Reduce variability	RNA, DNA and proteins are isolated from a single sample with no splitting of the lysate, thus reducing inconsistent results and variability.
Isolate from small samples	Sequential isolation of RNA, DNA and protein from a single sample. Ideal for precious, difficult to obtain or small samples such as biopsy material or single foci from cell cultures.
Rapid procedure	Isolate total RNA, genomic DNA and total proteins from a single sample in < 35 minutes.
Isolate a diversity of RNA species	All sizes of RNA are isolated, from large mRNA down to microRNA
Process a wide range of sample types	Isolate total RNA, genomic DNA and proteins from cultured animal cells, tissue, blood, bacteria, yeast, fungi and plants.

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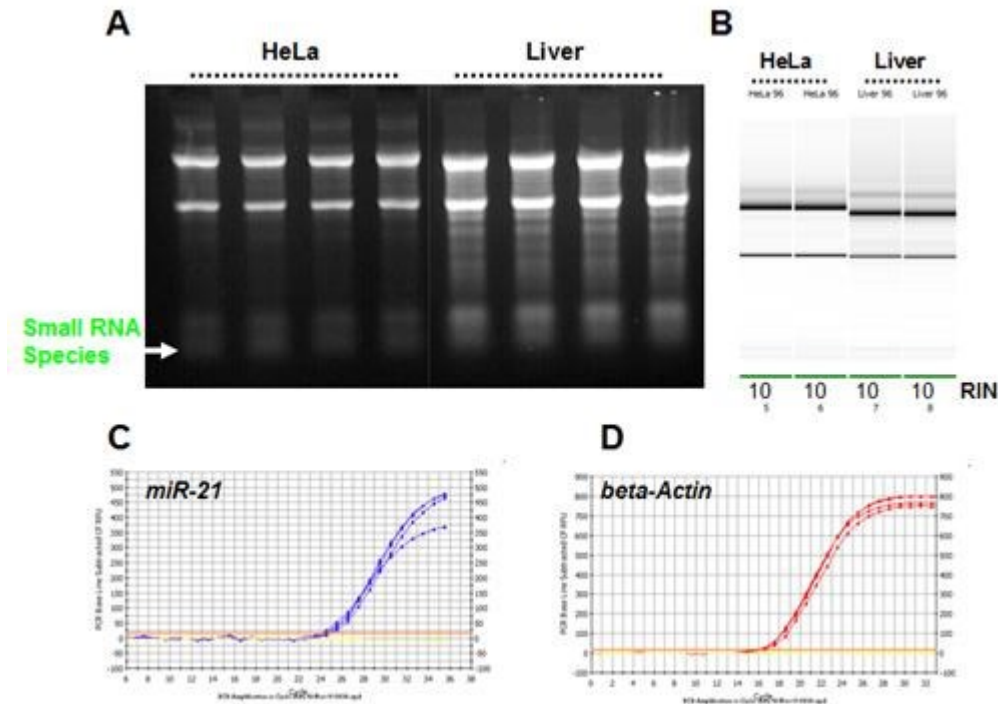


Figure 1. High Throughput Isolation of High Quality RNA with Complete Size Range without the Use of Phenol. Norgen's RNA/DNA/Protein Purification 96-Well Kit allows for the consistent isolation of high quality RNA, with complete size range from the very large RNA down to small RNA without the use of phenol. HeLa RNA and Hamster Liver RNA was isolated using Norgen's RNA/DNA/Protein Purification 96-Well Kit in replicates. (A) The isolated RNA was resolved on a 1.2% formaldehyde agarose gel. All replicates showed both high yield and high quality. In addition, all replicates showed effective recovery of all sizes of RNA including the small RNA (arrow). (B) The isolated RNA was resolved on an Agilent RNA Nano 6000 Chip. All RNA achieved high RNA Integrity Number (RIN). The RNA isolated by Norgen's RNA/DNA/Protein Purification 96-Well Kit showed good recovery of both small RNA (miR-21, (C)) and large RNA (beta-Actin, (D)).

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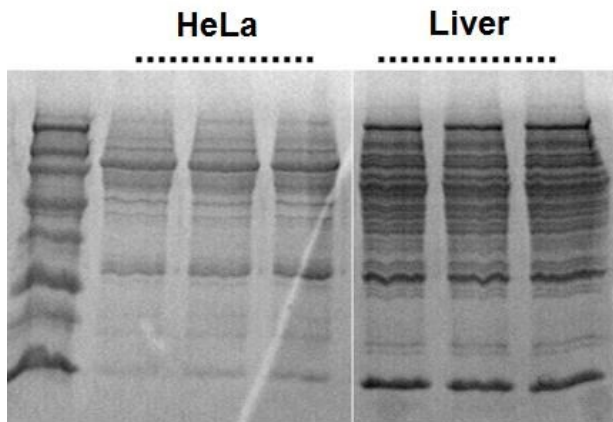


Figure 2. Consistent Isolation and Purification of Total Protein from the same sample used for RNA and DNA Isolation. Norgen's RNA/DNA/Protein Purification 96-Well Kit allows concurrent isolation of RNA, DNA and protein from the same sample without splitting. The flowthrough samples from the RNA/DNA isolation in Figure 1 and Figure 2 were further purified using Norgen's RNA/DNA/Protein Purification 96-Well Kit. Ten microliters of the 100 μ L protein elutions were loaded on a 10% SDS-PAGE gel. The proteins are consistent in yield, intact and of the highest quality, and can be used in a number of different downstream applications.

Storage Conditions

All solutions should be kept tightly sealed and stored at room temperature. These reagents should remain stable for at least 1 year in their unopened containers. The Protein Loading Dye should be stored at -20°C after the addition of DL-Dithiothreitol (DTT).

Shipping Conditions

The RNA/DNA/Protein Purification Kit is shipped at room temperature.

Customer-Supplied Reagents and Equipment

- For Vacuum Format:
 - Vacuum manifold with vacuum pump capable of generating a minimum pressure of -650 mbar or -25 in. Hg
 - Sealing tape or pads
- For Centrifuge Format:
 - Centrifuge with rotor for 96-well plate assembly
- 96 - 100% ethanol
- Isopropanol
- β -mercaptoethanol (optional)
- Molecular Biology Grade Water
- DL-Dithiothreitol (DTT)

Cat #	Description	Quantity
51700	RNA/DNA/Protein 96-Well Purification Kit	96 preps