

Comparison of genomic DNA extracted from whole blood using the ARA MagNA Blood DNA Isolation Kit and competitor's kits.

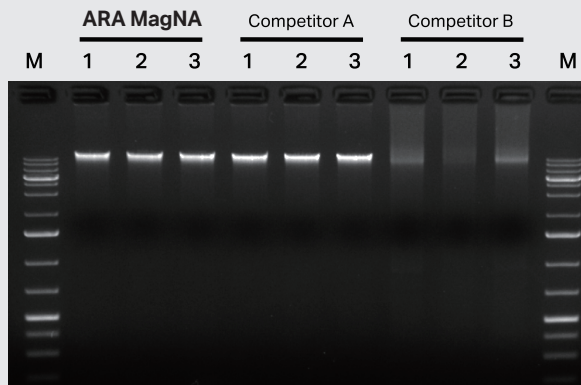


Figure 2. Comparison of quality of gDNA extracted from human whole blood using the ARA MagNA Blood DNA Isolation Kit and competitor's kits.

Genomic DNA was isolated from 200 μ L of whole blood using ARA MagNA Blood DNA Isolation Kit and competitor's kits. The extracted DNA was evaluated by loading 100 ng of DNA on 1% TAE agarose gel.

M : DNA Ladder
 Lane 1 ~ 3 : ARA MagNA Blood DNA Isolation Kit
 Lane 4 ~ 6 : Competitor A Genomic DNA Extraction Kit
 Lane 7 ~ 9 : Competitor B Genomic DNA Extraction Kit

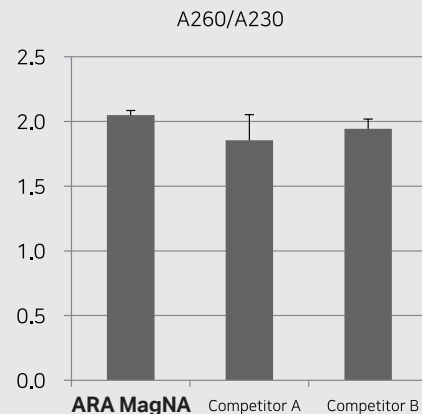
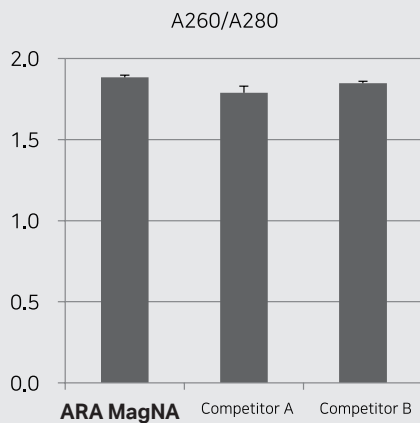


Figure 3. Comparison of purity of gDNA extracted from human whole blood using the ARA MagNA Blood DNA Isolation Kit and competitor's kits. The ARA MagNA Blood DNA Isolation Kit showed a better purity than the competitor's kits.

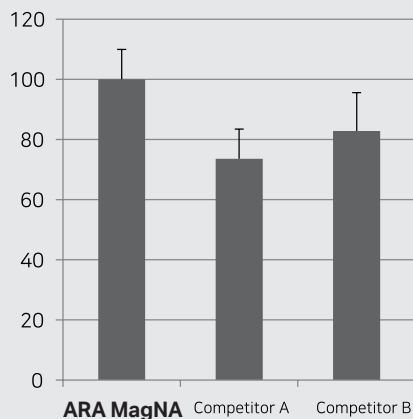


Figure 4. Comparison of quantity of gDNA extracted from human whole blood using the ARA MagNA Blood DNA Isolation Kit and competitor's kits.

The results showed that the ARA MagNA Blood DNA Isolation Kit yielded more gDNA compared to the competitor's kits. The yield was expressed as a percentage relative to DNA obtained from the ARA MagNA Blood DNA Isolation Kit (set to a value of 100).

Distribution

ARA MagNA

Cell-Free DNA Isolation Kit
1 mL / 100 preps

The concentration of cfDNA is overall low, which is problematic as many techniques require higher DNA amounts than those can be isolated from a typical plasma sample. Genomic DNA contamination also dilutes out cfDNA, preventing the detection of rare variants. You can overcome these challenges with ARA MagNA Cell-Free DNA Isolation Kit. This kit is designed for the rapid isolation of high quality, high yield cfDNA from plasma and serum. The preparation time for a single sample is less than 60 minutes (Figure 1). The kit contains sufficient materials for 100 preparations. The purified, high-quality DNA is ready-to-use for a wide variety of demanding downstream applications.

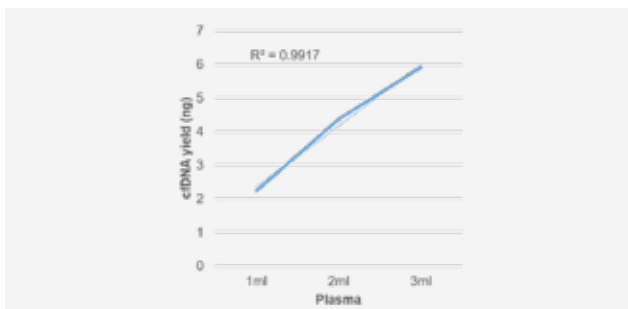
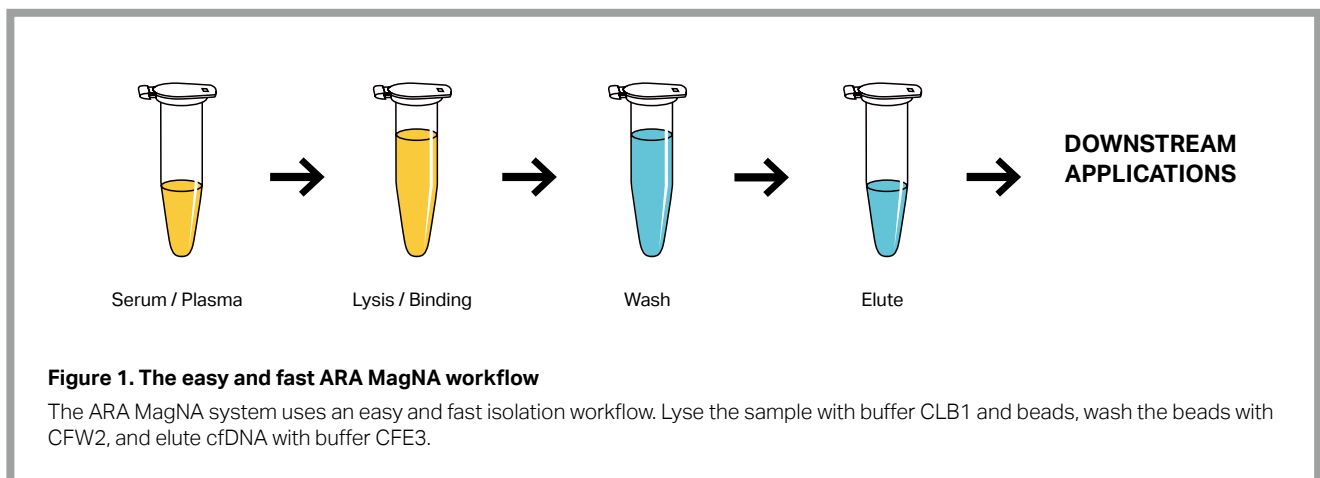


Figure 2. cfDNA isolation with ARA MagNA system is scalable.

The scalable isolation procedure allows variable volume samples. The results show highly linear across the input sample volumes.

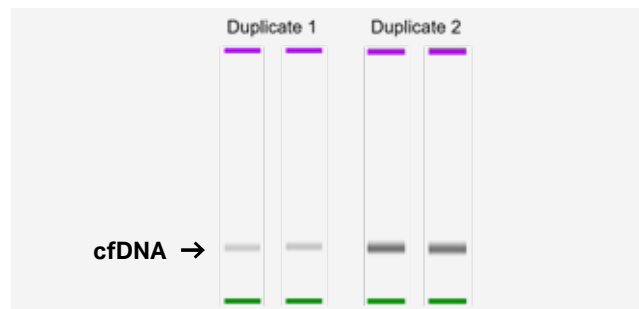


Figure 3. cfDNA isolation with ARA MagNA system is reproducible.

We isolated cfDNA from 1 mL of the same plasma sample in duplicate using ARA MagNA. The similar yields demonstrate the reproducibility of ARA MagNA.

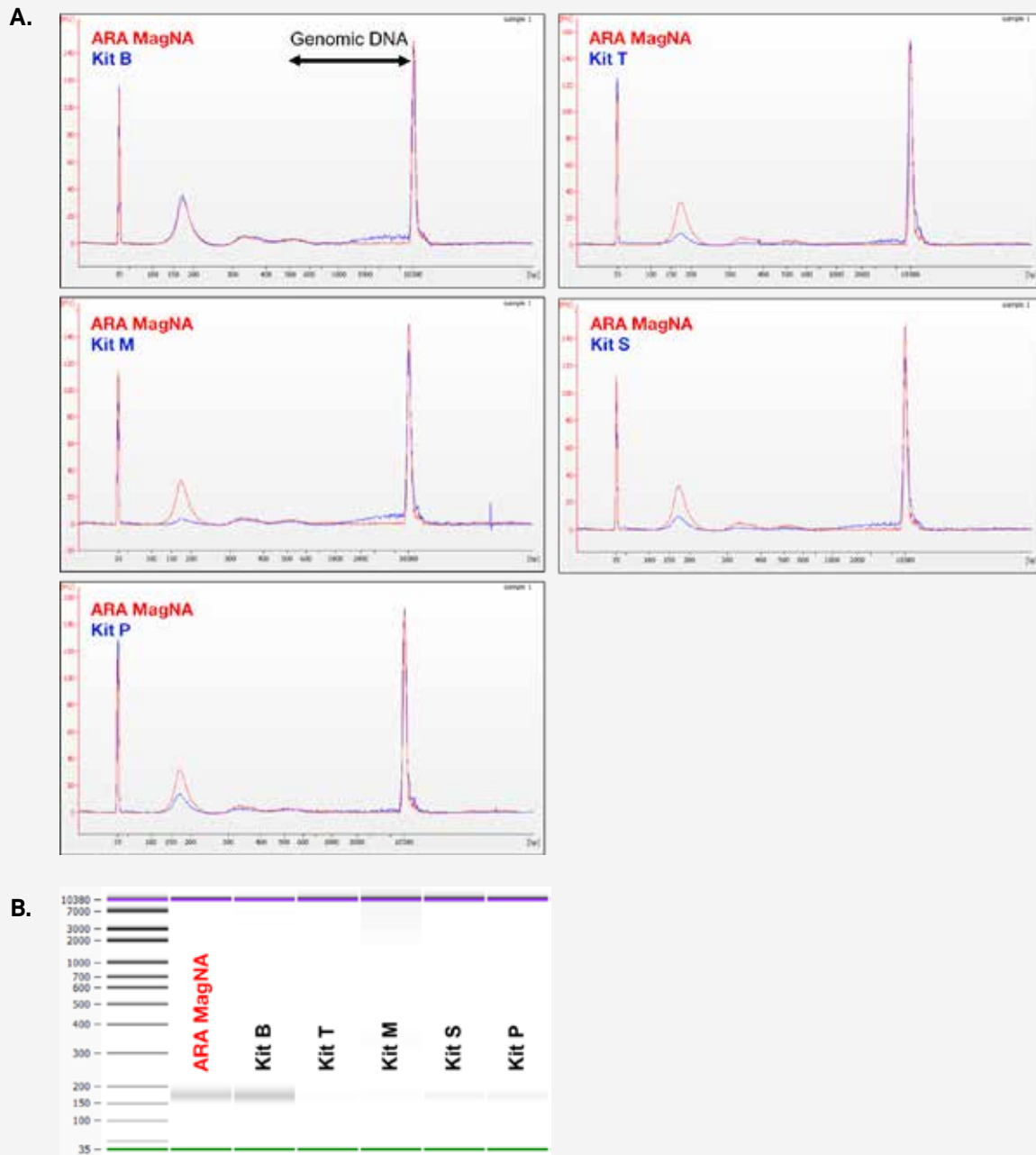


Figure 4. Analysis on cfDNA isolated plasma using Agilent™ High Sensitivity DNA Analysis

We isolated cfDNA from 1 mL of plasma using the ARA MagNA Cell-Free DNA Isolation Kit (red) and competing kits (blue). DNA isolated from the ARA MagNA kit shows higher cfDNA levels with lower levels of genomic DNA than competing kits.

A. Electropherogram, B. Gel electrophoresis.

Ordering information

Product Description	Catalog Number	Unit
ARA MagNA Cell-Free DNA Isolation Kit	BKD4DPS100	1 mL / 100 preps

ARA MagNA

Tissue DNA Isolation
96 preps



With the ARA MagNA (Tissue DNA Isolation Kit) method, genomic DNA is prepared from cells (e.g., cultured cells, bacteria), tissues, blood, and many other sources. This kit provides reagents and magnetic beads for isolation of 96 samples. The Purified, high-quality DNA is ready-to-use for a wide variety of demanding downstream applications.

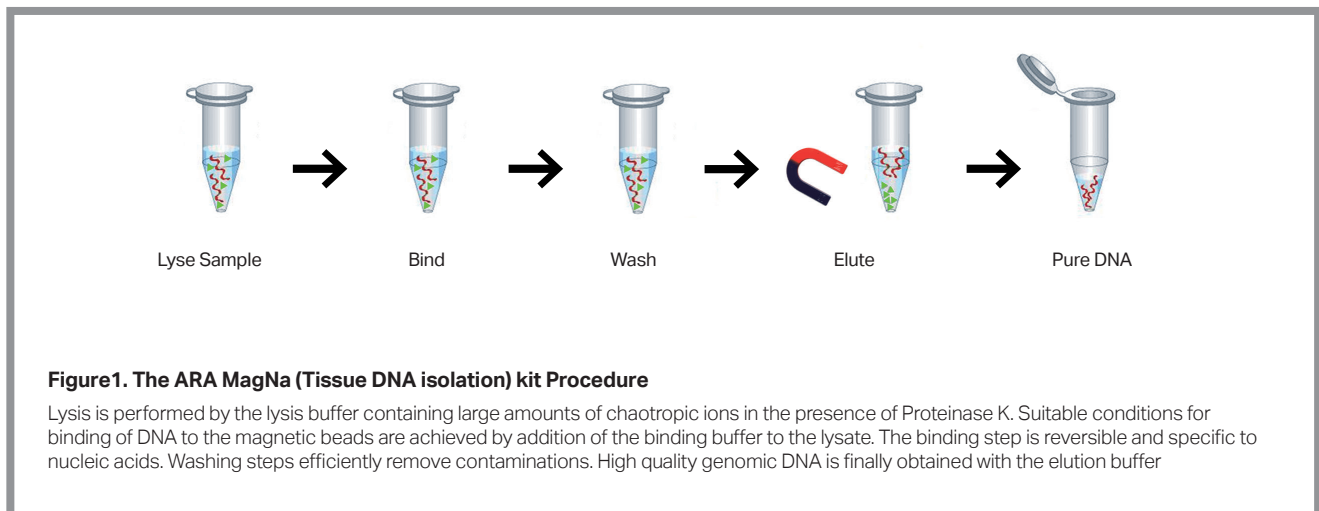


Figure1. The ARA MagNA (Tissue DNA isolation) kit Procedure

Lysis is performed by the lysis buffer containing large amounts of chaotropic ions in the presence of Proteinase K. Suitable conditions for binding of DNA to the magnetic beads are achieved by addition of the binding buffer to the lysate. The binding step is reversible and specific to nucleic acids. Washing steps efficiently remove contaminants. High quality genomic DNA is finally obtained with the elution buffer

Specifications

- Isolation of genomic DNA from tissue, cultured cells, bacteria, and whole blood.
- Purification of highly pure genomic DNA with an A260/A280 ratio between 1.8 and 2.0 and A260/A230 ratio greater than 2.0.
- All steps are performed at room temp. excluding prelysis step.
- Ready-to-use for subsequent reactions like PCR, Southern blotting, any kind of enzymatic reactions, or library preparation for NGS.

Ordering information

Product Description	Catalog Number	Unit
ARA MagNA Tissue DNA Isolation Kit	LKD4TSD96	96 preps

ARA MagNA

Viral RNA Isolation Kit
96 preps



A good RNA isolation protocol is of high importance, since RNA is more unstable than DNA and many clinical samples contain RNases. The detection of viruses in different types of samples is a challenging procedure in relation to low virus concentration and to the presence of significant RT-PCR inhibitors. However, you can overcome these challenges with ARA MagNA Viral RNA Isolation Kit. This kit is designed for the rapid isolation of high quality, high yield viral RNA from cell free body fluids such as plasma, serum, urine and rinse liquid from swabs. Preparation time for a single sample is less than 30 minutes (Figure 1). The kit contains sufficient materials for 96 preparations. The purified, high-quality viral RNA is ready-to-use for a wide variety of demanding downstream applications.

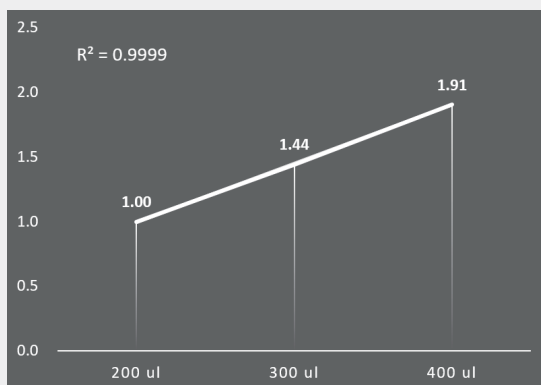
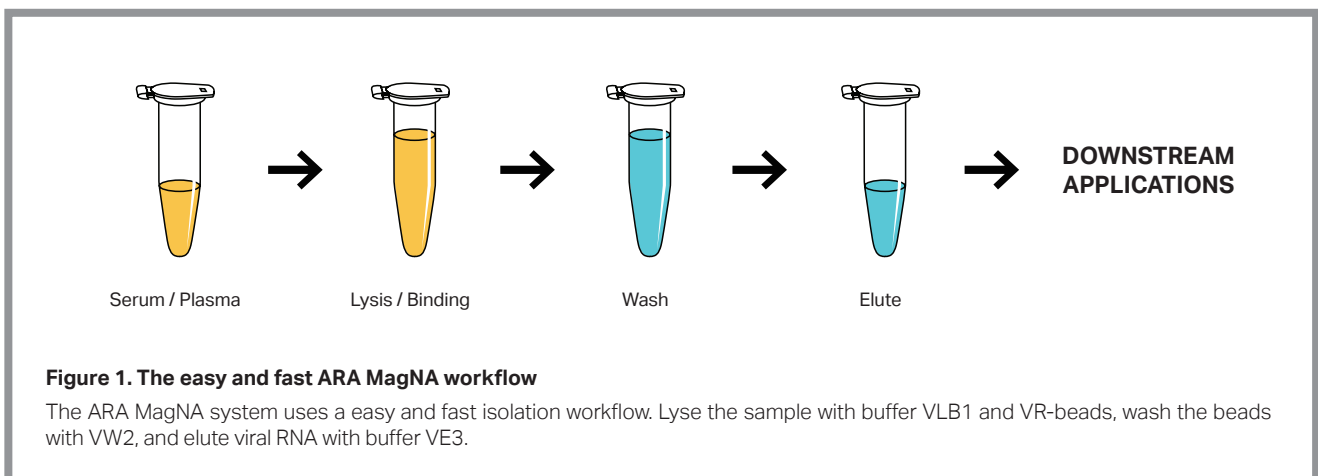


Figure 2. Viral RNA isolation with ARA MagNA system is scalable.

We added the viral supernatant to the rinse liquid from swabs and then isolated the viral RNA from increasing volumes of the same sample. The scalable isolation procedure allows variable volume samples. The results show highly linear across the input sample volumes. The isolated viral RNA was used in the qRT-PCR. All levels are shown relative to 200 μ l of input (set to a value of 1).

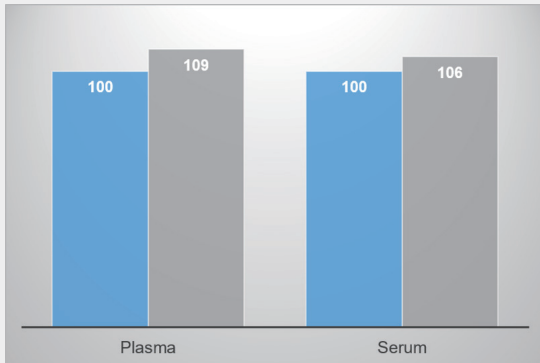


Figure 3. Viral RNA Isolation with ARA MagNA system is reproducible.

We added the viral supernatant to plasma or serum and then isolated the viral RNA from the same sample in duplicate using ARA MagNA. The similar yields demonstrate the reproducibility of ARA MagNA. The isolated viral RNA was used in the qRT-PCR. Levels are shown relative to the blue bar (set to a value of 100).

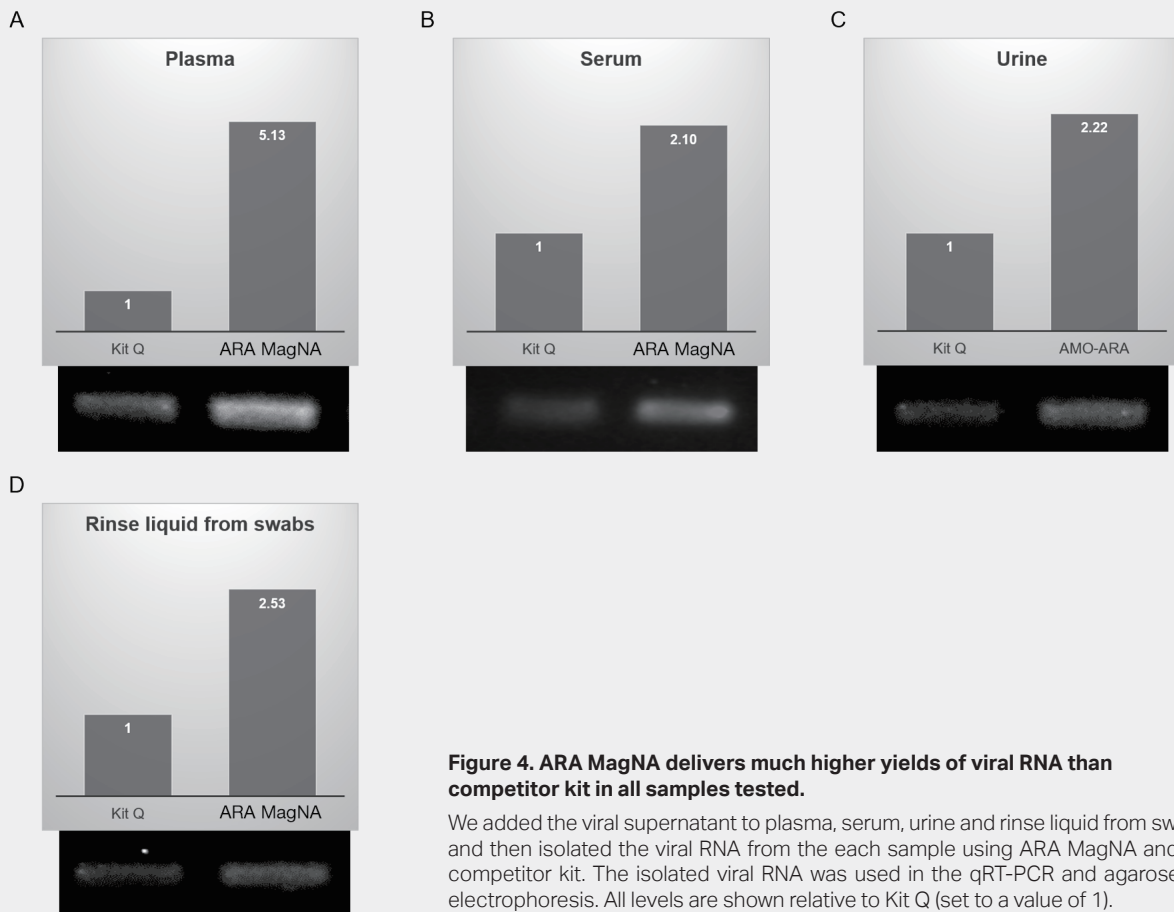


Figure 4. ARA MagNA delivers much higher yields of viral RNA than competitor kit in all samples tested.

We added the viral supernatant to plasma, serum, urine and rinse liquid from swabs, and then isolated the viral RNA from the each sample using ARA MagNA and the competitor kit. The isolated viral RNA was used in the qRT-PCR and agarose gel electrophoresis. All levels are shown relative to Kit Q (set to a value of 1).

Ordering information

Product Description	Catalog Number	Unit
ARA MagNA Viral RNA Isolation Kit	BKD4VIR96	96 preps
	BKD4VIR384	384 preps
	BKD4VIR1000	1,000 preps

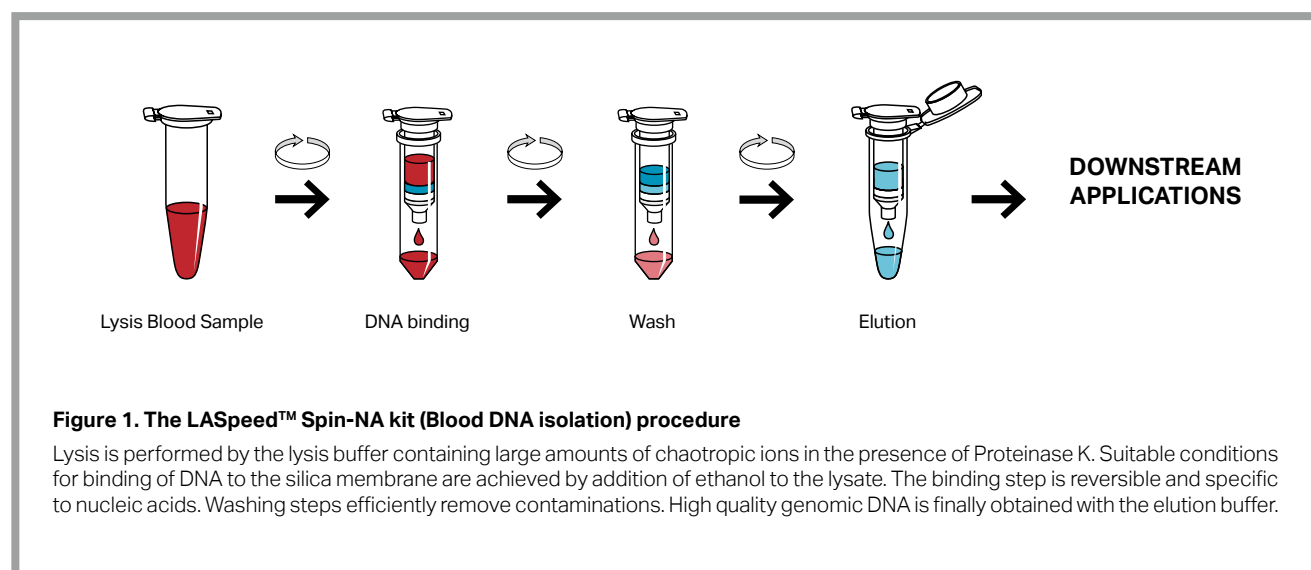
Distribution

LASpeed™ Spin-NA Kit

Blood DNA Isolation
50 Preps



LASpeed™ Spin-NA Kit (Blood DNA isolation) is designed for the rapid isolation of high quality genomic DNA from whole blood. Preparation time for a single sample is less than 20 minutes (Figure 1), decreasing the chances of DNA degradation. The kit contains sufficient materials for 50 preparations. The purified, high-quality DNA is ready-to-use for a wide variety of demanding downstream applications.



Specifications

- Isolation of genomic DNA without the use of harmful chemicals.
- Purification of highly pure genomic DNA with an A260/A280 ratio between 1.7 and 1.9.
- More than 4 µg per sample using 200 µL of whole blood.
- Ready-to-use for subsequent reactions like PCR, Southern blotting, any kind of enzymatic reactions, or library preparation for NGS.

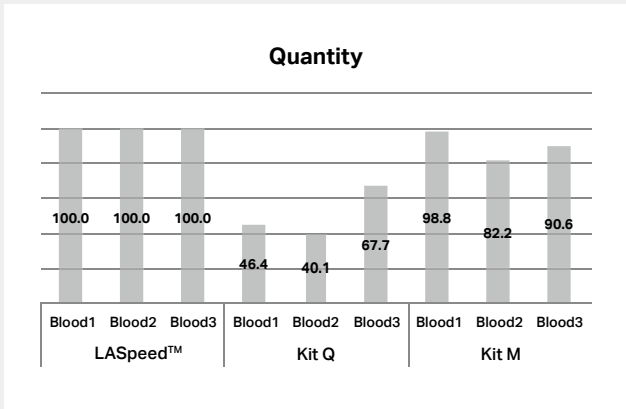


Figure 2. Comparison of quantity of gDNA extracted from human whole blood using the LASpeed™ Spin-NA Kit and competitor's kits.

The results showed that the LASpeed™ Spin-NA Kit yielded more gDNA compared to the competitor's kits. The yield was expressed as a percentage relative to DNA obtained from the LASpeed™ Spin-NA Kit (set to a value of 100).

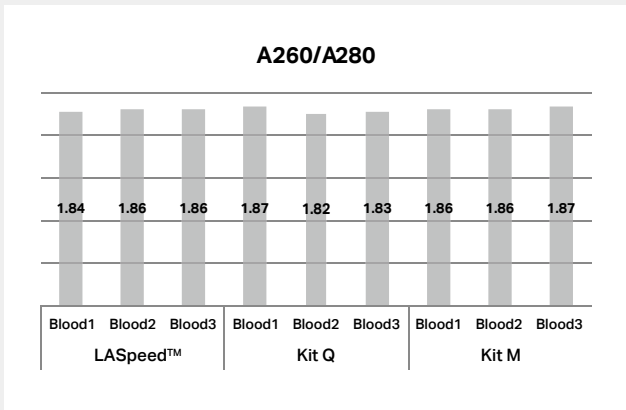


Figure 3. Comparison of purity of gDNA extracted from human whole blood using the LASpeed™ Spin-NA Kit and competitor's kits.

The LASpeed™ Spin-NA Kit showed similar purity compared to the competitor's kits.



Figure 4. Comparison of quality of gDNA extracted from human whole blood using the LASpeed™ Spin-NA Kit and competitor's kits.

Genomic DNA was isolated from 200 µL of whole blood using LASpeed™ Spin-NA Kit and competitor's kits. The extracted DNA was evaluated by loading 100 ng of DNA on 1% TAE agarose gel.

M: DNA Ladder
 Lane 1-3: LASpeed™ Spin-NA Kit
 Lane 4-6: Kit Q
 Lane 7-9: Kit M

Ordering information

Product Description	Catalog Number	Unit
LASpeed™ Spin-NA Kit (Blood DNA Isolation)	LKR4DBL50	50 preps