### Manual and automated extractions

Protocol options for both manual and automated extractions.

### Fast extraction

Fast extraction of nucleic acid using automated liquid handing robots (<15 min).

### Sample volume

Sample volume of 10-200 µl.

### Elution volume

Elution volume of 50-200 µl.

### Attractive price

Highly attractive pricing.

# NAxtra™ Blood total nucleic acid extraction kit

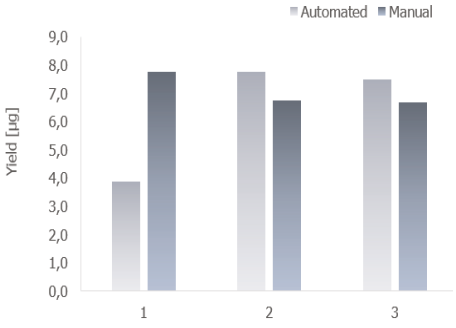
## Fast and easy isolation of high-quality DNA and RNA

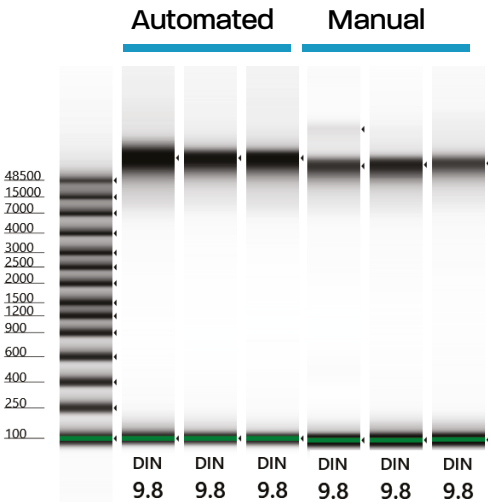
The NAxtra™ Blood total nucleic acid extraction kit is a magnetic bead-based technology developed for total nucleic acid extraction from whole blood samples. The protocol is developed for fast and easy isolation of high integrity nucleic acids and the extraction protocol may be implemented on any open automation system. The total processing time is 23 minutes when run on the KingFisher™ Flex/Duo system.

The kit is intended for research use only and should be used for isolation of total nucleic acids to be used in downstream applications such as for example PCR and next-generation sequencing. The protocol is optimized using EDTA as stabilizer during sample collection. The kit may be combined with sample collection devices and downstream assays of your choice*.

### DNA yield from 100 µl whole blood

Figure 1: DNA yield from 100 µl whole blood from three samples extracted using the NAxtra™ Blood total nucleic acid extraction kit. The isolation was performed on either a King Fisher™ Duo automated system or by manual handling using a magnetic rack. DNA yield was determined using Thermo Fisher Scientific's NanoDrop ® 2000c system. The results showed yield of about 4-8 µg nucleic acids from 100 µl whole blood input.

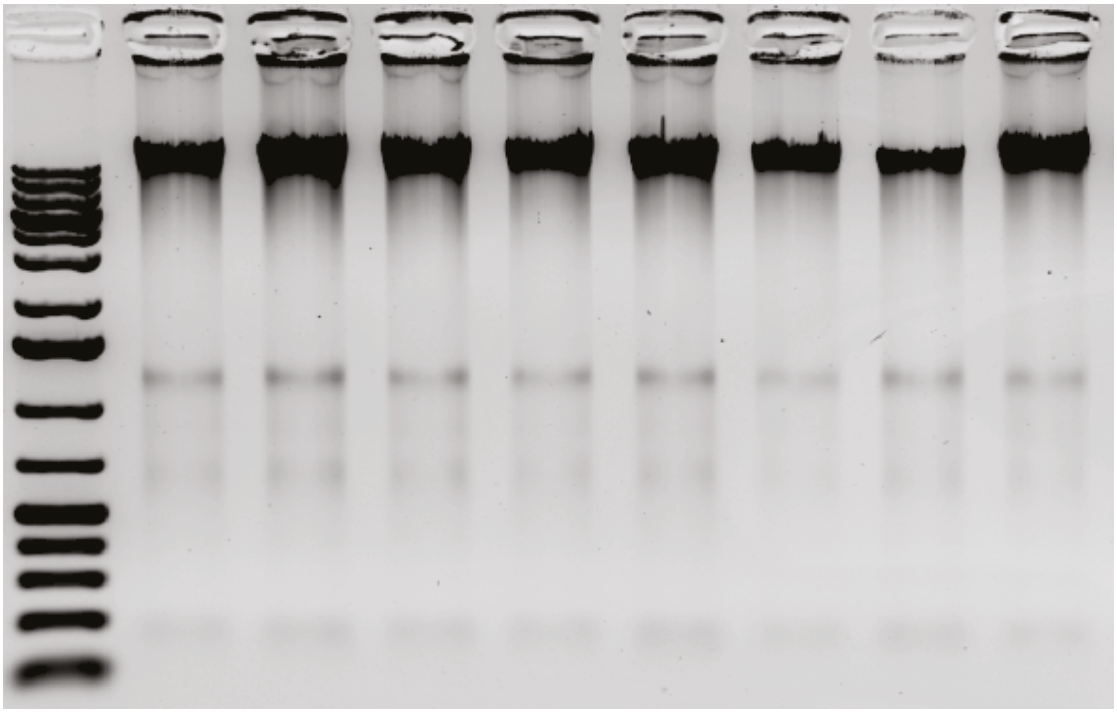



### TapeStation® analysis of purified DNA

Figure 2: TapeStation® analysis of the same samples as shown in figure 1. Genomic DNA was purified from 100 µl whole blood using Lybe Scientific's NAxtra™ Blood total nucleic acid extraction kit and the eluates analyzed on a TapeStation®. The results demonstrate consistently high yield and DNA integrity (DIN values at 9.8) when isolated by either automated or manual procedures.

* It is the sole responsibility of the user to validate the performance in combination with a particular downstream assay and / or automation device.



## High integrity DNA and RNA from whole blood samples

Figure 3: The NAxtra™ Blood total nucleic acid extraction kit is suited for both DNA and RNA isolation from whole blood samples with 10-200 µl input. The gel image shows the extracted nucleic acids from a set of eight whole blood samples isolated using a King Fisher™ Duo automated system with 200 µl sample input volume. The nucleic acids were eluted in 100 µl RNAse/DNAse free water and 5 µl was loaded on an agarose gel. The results illustrate both high integrity DNA in addition to two clear RNA bands representing the 18S and 28S ribosomal RNA from the samples. Taken together, the NAxtra™ Blood total nucleic acid extraction kit is a fast and easy to use solution for isolation of pure and high-integrity DNA and RNA from whole blood samples. The isolated nucleic acids are suitable for most downstream applications such as PCR and next-generation sequencing.

## Ordering info

NAxtra™ Blood total nucleic acid extraction kit can be purchased in 48 and 96 reaction versions. Contact us if you need bulk quantities.

| Cat.no | Product |
|---|---|
| LSBL0048 | NAxtra™ Blood total nucleic acid extraction kit, 48 reactions |
| LSBL0096 | NAxtra™ Blood total nucleic acid extraction kit, 96 reactions |