

# Blood DNA Purification Kit - 30 mL

Norgen's Blood DNA Purification Kit – 30 mL provides a fast and simple procedure for purifying high molecular weight genomic DNA from up to 10 mL of blood. The kit allows for the isolation of genomic DNA from the blood of various species, including humans. Typical yields of genomic DNA will vary depending on the cell density of the blood sample. Preparation time for a single sample is about 30-60 minutes (+ DNA rehydration). Blood genomic DNA purified using Norgen's kit is of the highest quality, and is compatible with a number of downstream applications including PCR, Southern Blot analysis, sequencing and microarray analysis.



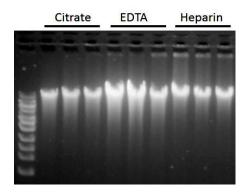
Purification is based on the lysis of blood cells using the Kit's **Blood Lysis Solution** and the **Lysis Additive C**, followed by the addition of **Purification Solutions A**, **B & C** to clean the DNA from the residual impurities. Genomic DNA is then recovered by alcohol precipitation and dissolved in the **DNA Rehydration Solution**. The size of the purified blood genomic DNA is up to 200 kbp with a typical  $A_{260}/A_{280}$  ratio of >1.7.

Kit Specifications			
Minimum Blood Input	0.3 mL	Average Purity (OD260/280)	> 1.7
Maximum Blood Input	10 mL	Time to Complete 10 Purifications	30-60 minutes (+ DNA rehydration)
DNA Size	Up to 200 kbp	Average Yield from 1 mL of whole blood (7 x 106 white blood cells)	24 μg*

Blood DNA Purification Kit - 30 mL Benefits			
Fast and simple	Easy and quick processing times		
Robust	DNA can be isolated and detected from as little as 300 µL of blood		
High Quality	Isolate high quality and high molecular weight genomic DNA		
Compatible with down- stream applications	Recovered genomic DNA is compatible with various downstream applications		



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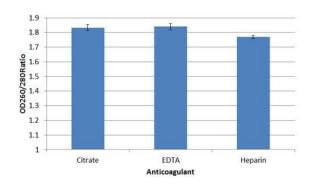


Figure 1. High Yields of Genomic DNA Isolated from 300  $\mu$ L of Whole Blood. Genomic DNA was isolated from 300  $\mu$ L of whole blood collected on different anticoagulants (Citrate, EDTA and Heparin, different donors) using Norgen's Blood Genomic DNA Purification Kit. Following isolation, 10  $\mu$ L from each 100  $\mu$ L elution was loaded on 1% TAE agarose gel. As can be seen, purified DNA has a good yield and integrity. The ladder is Norgen's UltraRanger 1kb DNA Ladder.

#### **Blood DNA Purification Kit - 30 mL Contents**

- 1. Blood Lysis Solution
- 2. Lysis Additive C
- 3. Purification Solution A
- 4. Purification Solution B
- 5. Purification Solution C
- 6. DNA Rehydration Solution
- 7. Product Insert

### **Shipping 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.

Figure 2. High purity of Genomic DNA Isolated from 300  $\mu$ L of Whole Blood. Genomic DNA was isolated from 300  $\mu$ L of whole blood collected on different anticoagulants (Citrate, EDTA and Heparin, different donors) using Norgen's Blood Genomic DNA Purification Kit. Following isolation, OD260/280 ratios were measured using a spectrophotometric method. As can be seen, purified DNA from blood collected on these different anticoagulants has a good OD260/280 ratio of > 1.7.

Customer-Supplied Reagents and Equipment

- Benchtop microcentrifuge
- Micropipettors and pipette tips
- 1.5 mL sterile microcentrifuge tubes, 15 mL centrifuge tubes or 50 mL centrifuge tubes
- Isopropanol
- 70% ethanol
- 56°C incubator and 65°C incubator
- Lysozyme
- 37°C incubator

#### **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.

Cat #	Description	Quantity
52500	Blood DNA Purification Kit - 30 mL	Variable
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