

## Blood DNA Isolation Maxi Kit

Norgen's Blood DNA Isolation Maxi Kit is designed for the rapid preparation of genomic DNA from 3 mL up to 10 mL of whole blood. Purification is based on spin column chromatography as the separation matrix. Norgen's column binds DNA under optimized salt concentrations and releases the bound DNA under low salt and slightly alkali conditions. The purified genomic DNA is fully digestible with all restriction enzymes tested, and is completely compatible with downstream applications including real-time PCR and southern blot analysis.



Norgen's Blood Genomic DNA Isolation Maxi Kit allows for the isolation of genomic DNA from the blood of various species, including humans. The

genomic DNA is preferentially purified from other cellular proteinaceous components. Typical yields of genomic DNA will vary depending on the cell density of the blood sample. Preparation time for a single sample is less than 55 minutes, and each kit contains sufficient materials for 12 preparations.

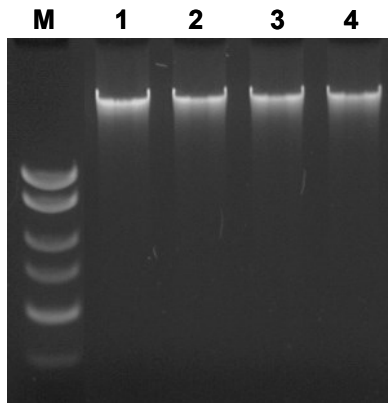
Kit Specifications			
Minimum Blood Input	3 mL	Average Yield *	200-600 µg
Maximum Blood Input	10 mL	Time to Complete 10 Purifications	60 minutes

\* Yield will vary depending on the type of blood processed

### Blood Genomic DNA Isolation Maxi Kit Benefits

Fast and easy processing	Rapid spin-column format allows for the processing of multiple samples in 60 minutes.
High quality DNA	Isolated DNA is of the highest quality and free from RNA contamination (Figure 1).
Recovered genomic DNA is suitable for downstream applications	Purified genomic DNA is fully compatible with restriction enzyme digestions, PCR (Figure 2), and Southern Blot analysis.

## Blood DNA Isolation Maxi Kit



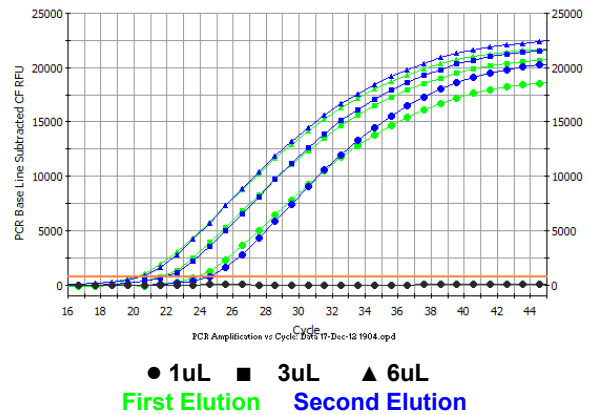
**Figure 1. High Yields of Genomic DNA Isolated from Whole Blood.** Genomic DNA was isolated from two different 2 mL whole blood samples using Norgen's Blood DNA Isolation Maxi Kit. Following isolation, 10  $\mu$ L from each 1 mL elution was loaded on 1% TAE agarose gel. Lanes 1 and 3 correspond to the first elution, while Lanes 2 and 4 correspond to the second elution. Norgen's Blood DNA Isolation Maxi Kit demonstrated a high yield of intact genomic DNA.

### Blood DNA Isolation Maxi Kit Contents

1. Lysis Buffer B
2. Solution WN
3. Wash Solution A
4. Elution Buffer B
5. Proteinase K
6. Maxi Spin Columns
7. Collection Tubes
8. Elution Tubes
9. Product Insert

### Customer-Supplied Reagents and Equipment

- Variable speed swing bucket centrifuge
- Micropipettors
- 56°C water bath or incubator
- 70°C water bath or incubator
- 96 - 100% ethanol
- Vortex



**Figure 2. Purified DNA Can be Amplified in a Real-time PCR (TaqMan) Reaction.** Genomic DNA was isolated from 10 mL of whole human blood using Norgen's Blood DNA Isolation Maxi Kit. Different input amounts (1, 3 & 6  $\mu$ L) of the DNA from each of the 1 mL elutions was used in a real-time PCR reaction (total reaction volume of 20  $\mu$ L) with GAPDH TaqMan probe and primers. The real-time PCR was successful in amplifying the GAPDH gene, indicating that the DNA is of a high quality and can be used in sensitive downstream applications. The black line is a no-template control.

### Shipping Conditions

The Blood DNA Isolation Maxi Kit is shipped at room temperature.

### 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 kit contains a ready-to-use Proteinase K solution, which is dissolved in a specially prepared storage buffer. The Proteinase K is stable for up to 1 year after delivery when stored at room temperature. To prolong the lifetime of Proteinase K, storage at 2–8°C is recommended.

Cat #	Description	Quantity
31200	Blood DNA Isolation Maxi Kit	12 preps