

## INTRODUCTION

The PureBind Blood DNA Isolation Kit is designed for isolating genomic DNA with high yield and high purity from human whole blood. The system utilizes magnetic bead technology, enabling efficient, consistent, and scalable extraction of genomic DNA from 10  $\mu$ l to 350  $\mu$ l of human whole blood. The extracted genomic DNA is free from protein and other contaminants, making it suitable for a variety of downstream applications, such as PCR, Real-time PCR, NGS sequencing, enzymatic digestion, or molecular cloning. The magnetic bead technology features uniform size and slow sedimentation rate, which makes it an excellent choice for high-throughput sample preparation.

## HIGHLIGHTS

- **High yields** of quality DNA compared to other magnetic bead-based methods
- **Scalable** for higher and lower input volumes from 10  $\mu$ l to 350  $\mu$ l
- **Automation-friendly** with proven adaptability to open-ended magnetic particle processors and liquid handlers
- **Eco-friendly** with no costly columns required and minimal use of plastics.
- **Compatible** with various commercially available blood stabilizer tubes.

## DOWNSTREAM APPLICATIONS

- PCR
- Real-time PCR
- NGS Sequencing
- DNA Methylation Analysis
- Enzymatic Digestion
- Molecular cloning

## High Integrity and Quality DNA

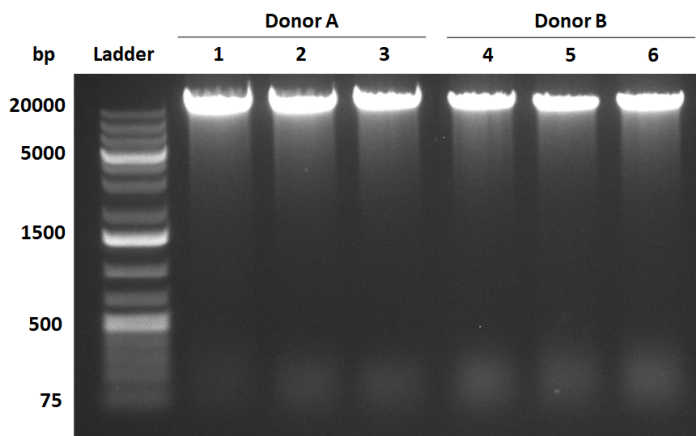


Figure 1. Example of reproducibility and minimal shearing and degradation using the PureBind Blood DNA Isolation Kit

The PureBind Blood DNA Isolation Kit isolated intact DNA from blood samples preserved in EDTA and delivers reproducible and consistent results with minimal shearing and degradation.

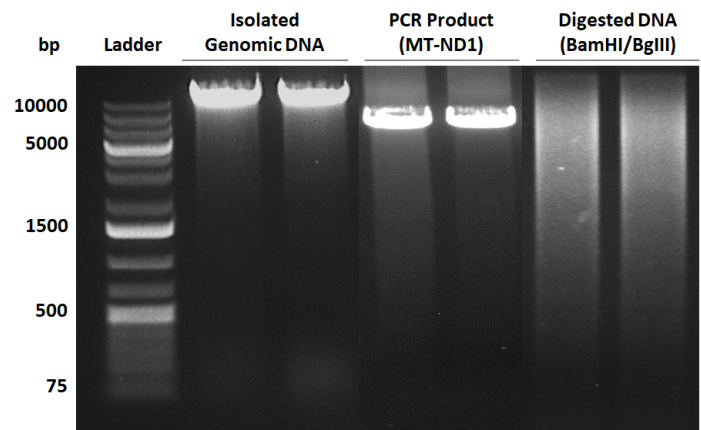


Figure 2. Example of quality DNA suitable for downstream applications

The PureBind Blood DNA Isolation Kit provides high quality DNA (e.g. genomic and mitochondrial) that is suitable for downstream applications, such as PCR and enzymatic digestion.

## Simple and Quick Workflow

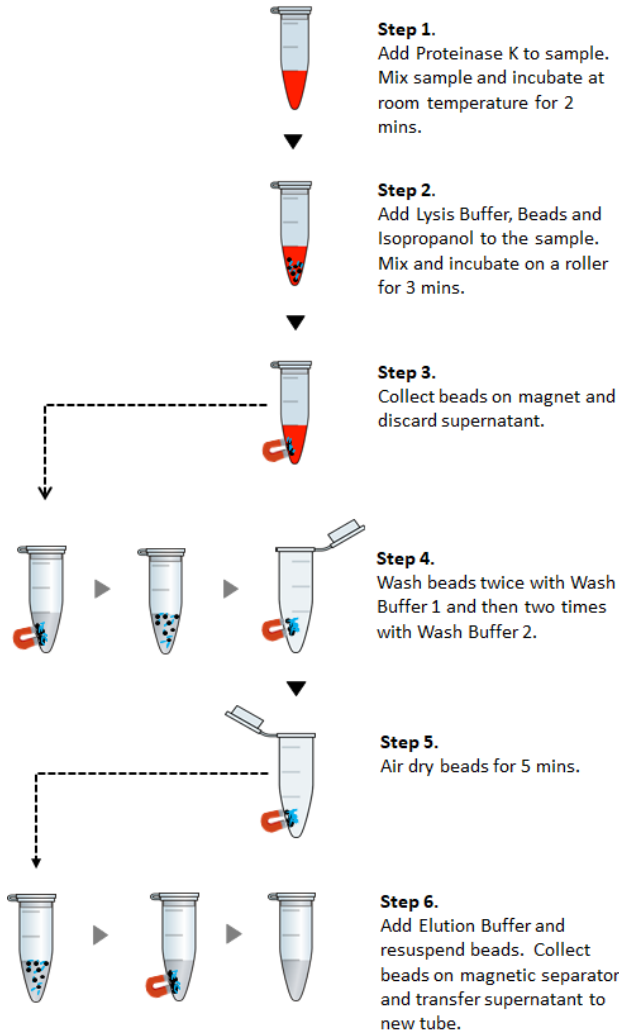


Figure 3. Illustration showing isolation procedures using the PureBind Blood DNA Isolation Kit

A chemo-enzymatic lysis of blood cells is followed by incubation with magnetic beads in the presence of isopropanol. During this incubation, the beads bind to DNA and are thereafter easily separated from the lysate using a magnet. Magnetic separation facilitates simple washing and elution of the isolated DNA.

## Ordering Information

Product Name	Catalog No.
PureBind Blood DNA Isolation Kit (96 preps)	B0711-096

## Higher Yields than Other Competitors

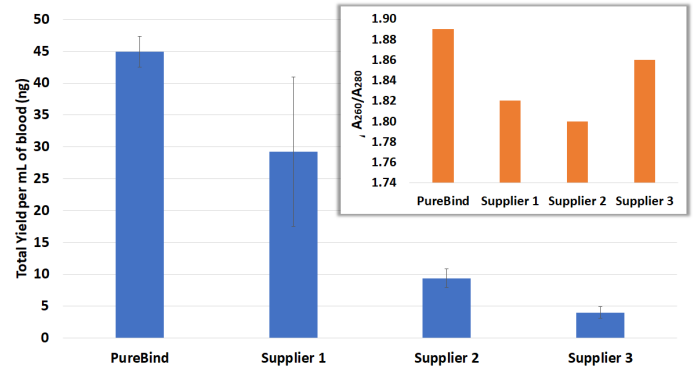


Figure 4. Higher DNA yields than leading competitors from healthy human whole blood samples

The PureBind Blood DNA Isolation Kit significantly outperforms other magnetic bead-based blood genomic DNA isolation kits in total yield and purity of isolated DNA.

## Compatible with Commercial Blood Tubes



Figure 5 Example of blood collection tubes that are compatible with the PureBind Blood DNA Isolation Kit

The PureBind Blood DNA Isolation Kit has been proven to be compatible with the Biomatrix DNAGard Blood Tube, Zymo DNA/RNA Shield, PaxGene Blood DNA Tubes, and EDTA tubes.

## Related Products

Product Name	Catalog No.
PureBind Blood DNA Isolation Kit (96 preps)	B0711-096
PureBind Swab DNA Isolation Kit (96 preps)	P0211-096
PureBind Viral Nucleic Acid Isolation Kit (96 preps)	P2211-096
PureBind Beads (5 ml)	P0202-005
PureBind Beads (50 ml)	P0202-050

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