



Clean Blood & Tissue DNA Kit

Genomic DNA
extraction based
on magnetic beads

Flexible genomic DNA extraction

Since the discovery of DNA, scientists have gained tremendous insights into the building blocks of life. While medicine has made remarkable progress using this information, a major part of the functioning of our DNA remains a mystery. For better prevention and treatment of genetic diseases, cancer, and other conditions, more research is required. We offer the Clean Blood & Tissue DNA Kit as a reliable start to your experiments.

Our genomic DNA extraction kit can process different sample types, such as whole blood, buffy coat, and up to 10 mg of tissue. Blood samples in EDTA and citrate tubes are fully compatible and the extracted DNA is immediately ready for downstream applications. Whether you are studying genetics, disease mechanisms, or developing new therapies, the Clean Blood & Tissue DNA Kit provides a strong foundation.

Benefits:



Easy automation



Wide variety of sample types



Suitable for (q)PCR/NGS

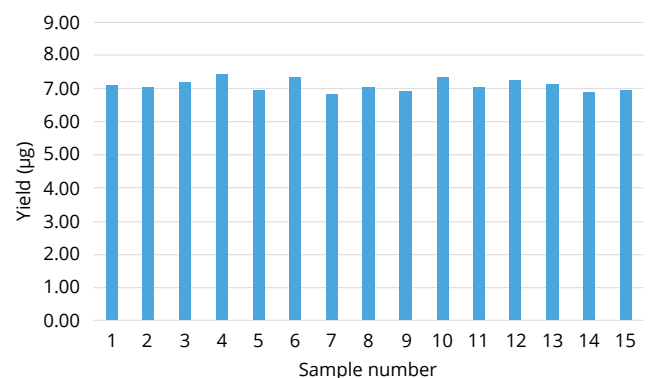
Application

As for downstream applications, the extracted DNA can directly be used for (q)PCR and NGS. The kit can be applied to a wide range of research areas, such as cancer research, women's health and genetics.

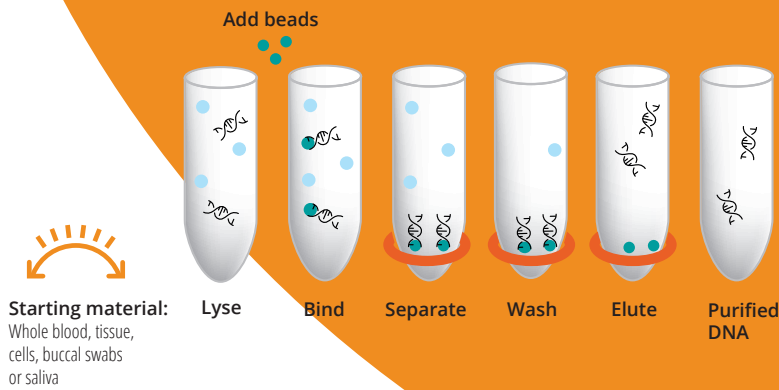
Proof of principle

To show the DNA yield of our kit, genomic DNA was extracted from 15 replicates of 250 μ L whole blood in CPD tubes, using the Clean Blood & Tissue DNA Kit. The DNA of the extracted samples was determined by a Denovix DS-11 FX fluorescence measurement. Figure 1 shows the DNA yield and variation.

FIGURE 1. Yield of genomic DNA extracted from 15 replicates of 250 μ L human whole blood.



Workflow



Samples are lysed using one of our specially formulated lysis buffers, which are optimized for the various types of starting material. Magnetic beads are added and DNA binds to them, after which the beads with DNA are separated from the lysate using a magnetic separation device. Rapid wash steps then ensure trace contaminants are removed, leaving the purified DNA to be eluted from the magnetic beads.

To demonstrate the purity of the extracted DNA, OD measurements were performed on the DNA extracted from the same 15 replicates. Figure 2 shows OD 260/280 ratios between 1,8 and 2,0 for all replicates, indicating pure DNA without protein contamination.

FIGURE 2. OD 260/280 ratio of genomic DNA extracted from 15 replicates of 250 µL human whole blood.

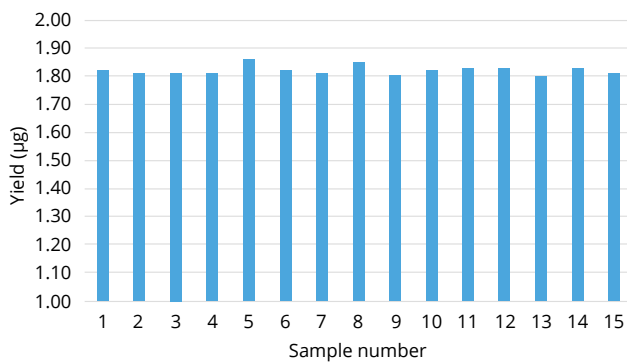
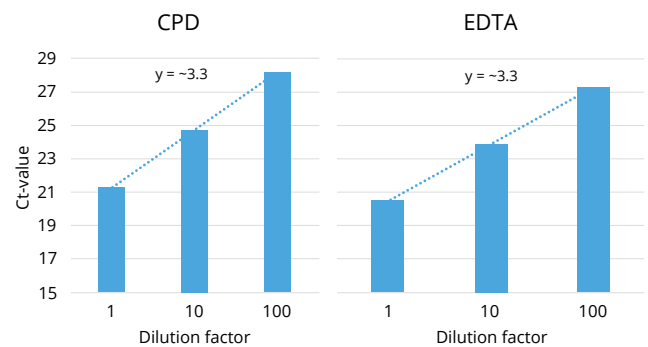


Figure 3 shows the results of an Albumin qPCR reaction with three different dilutions of human whole blood in EDTA tubes, each with 3 replicates. DNA was first extracted by the Clean Blood & Tissue DNA Kit. As shown by the Ct-values, the increase of the Ct is very close to 3.3 per 10-fold serial dilution, indicating the isolated genomic DNA is free of inhibitors.

FIGURE 3. qPCR reaction results of genomic DNA extracted from different dilutions of human whole blood, each with 3 replicates.



About CleanNA

CleanNA advances human health with reliable nucleic acid isolation solutions for life science and healthcare labs. Our portfolio includes research and CE-IVD diagnostic products. Our magnetic bead-based reagents are specifically designed to be used in automated laboratory workflows.

Clean Blood & Tissue DNA Kit v5-2025



Our quality management system is certified to EN-ISO 13485 by Bureau Veritas

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Ready to order?

Order via your local distributor or contact us via our details below.

Order info

Product	Preps	Part Number
Clean Blood & Tissue DNA Kit	96	CBT-D0096
Clean Blood & Tissue DNA Kit	384	CBT-D0384

Product	Pack size	Part Number
CleanXtract 96	1 System	CXT-I096
Clean Magnet Plate 96-Well	1 Plate	CMAG-96-RN50

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