

**magtivio**  
magnetic sample preparation

CE IVD

**MagSi-DX Blood**

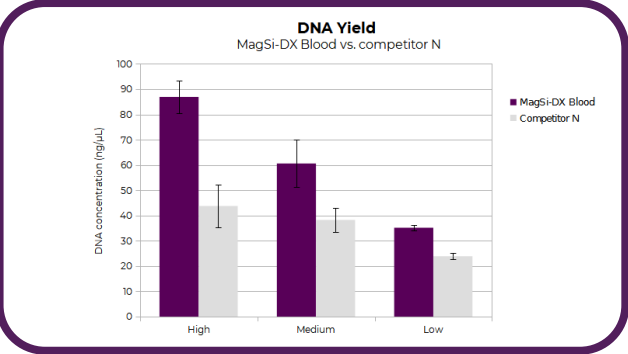
# Genomic DNA isolation from whole blood

Blood is the most common and reliable source for genetic testing, particularly for genetic disorders. Nucleated white blood cells (WBCs) in whole blood contain high-quality DNA, making it ideal for large-scale genomic sequencing and mutation detection. Genetic testing can help detect inherited diseases (e.g., cystic fibrosis, sickle cell anemia), identify mutations in oncogenes or tumor suppressor genes, or determine how individuals respond to drugs based on their genetic profile.

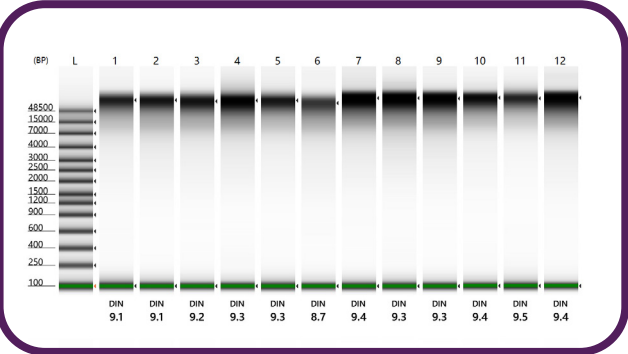
**MagSi-DX Blood** is intended for manual and automated extraction of genomic DNA from fresh or frozen whole blood for subsequent in vitro diagnostics assays. It can be used with blood collection tubes containing EDTA, citrate or heparin as anticoagulant. Obtained genomic DNA from the MagSi-DX Blood kit has a high molecular weight (see Figure 2), an important criteria for long-read technologies next to high quality (see Figure 3), which makes this kit very suitable for long read sequencing.

## Quality

- Consistently high yield of DNA
- Excellent purity; A260/280>1.7
- High DNA Integrity; DIN > 9
- Suitable for downstream in-vitro diagnostic assays, including PCR and (long-read) sequencing.



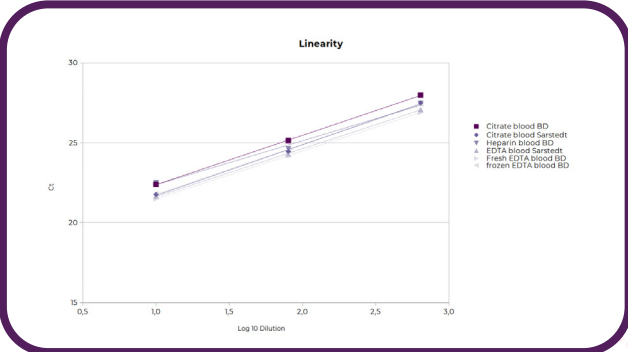
**Figure 1.** DNA concentrations obtained from 3 different donors with varying WBC counts (High, Medium, Low) with MagSi-DX Blood and a competitor kit (n=10).



**Figure 2.** Tapestation integrity assessment (Genomic DNA screentape) of DNA from whole blood stabilized with different anticoagulants from 2 donors. High DNA integrity numbers (DIN) were obtained, indicating high molecular weight DNA.

## Features

- Validated for different blood collection tubes
- Storage at room temperature
- Ready-to-use: no addition of alcohol or resuspension of Proteinase-K needed
- Short and easy protocol; 96 samples in 30 min
- Automation-ready: compatible with all market-leading automation (magnetic particle processors or liquid handling workstations)
- In Vitro Diagnostic Device (EU 2017/746) for streamlined validation of diagnostic workflows



**Figure 3.** PCR inhibition assessment of DNA after extraction from whole blood stabilized with different anticoagulants using MagSi-Dx Blood. DNA eluates were diluted in two 8-fold dilution steps and used as template in a real-time PCR targeting the ALB gene. Linear regression of the obtained Ct values vs dilution resulted in  $R^2 \geq 0.9995$ , indicating very good linearity.

Order via [order@magtivio.com](mailto:order@magtivio.com) or visit our site for more.

Art. No.	Description	Amount
MDDX00020096	MagSi-DX Blood	96 preps
MDDX00020960	MagSi-DX Blood	10x96 preps

