

## Product Profile

GENTi™ Advanced Blood DNA Extraction Kit (Cat. No. 903-096A, 903-048A)

# Fully automated genomic DNA extraction from blood sample on the GENTi™ Advanced

## Introduction

GENTi™ Advanced Blood DNA Extraction Kit is designed to extract high quality of genomic DNA from whole blood, plasma, serum, buffy coat, cell-free fluid, body fluid, virus-infected blood samples, swab and traces of biological materials.

The kit protocol enables DNA extraction procedure simple, fast and efficient with newly formulated powerful lysis buffer which eliminates the need for the use of PBS or hazardous buffers such as isopropanol and DDT.

Optimized washing buffer system removes proteins, salts and other contaminants out completely while DNA is eluted in the nuclease free water with high yield and purity.

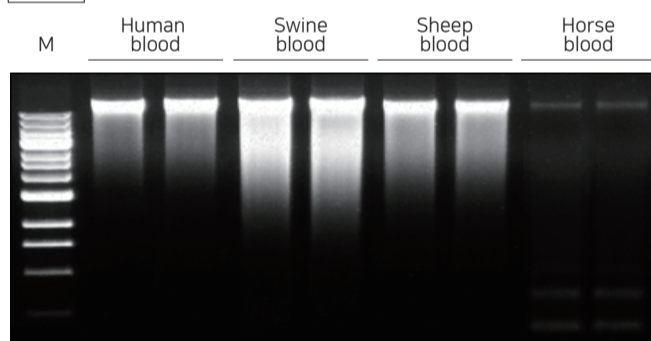
The purified DNA is of excellent quality and can be used for the downstream applications such as PCR, qPCR, NGS, Sanger sequencing and other molecular diagnostic testing.

## Benefits of the GENTi™ Advanced Blood DNA Extraction Kit

- High quality genomic DNA Extraction from a broad range of sample types
- Fast and convenient procedure with no additional erythrocyte lysis
- Suitable for fresh or frozen whole blood treated with EDTA and Heparin
- Allowing for pH stabilization of the DNA in long-term storage with Buffer EB
- High purity genomic DNA Extraction with minimal shearing suitable for clinical and forensic analysis

## Purify high-quality genomic DNA

Figure 1



	Human blood	Swine blood	Sheep blood	Horse blood
Yield	40.45	40.40	110.88	112.25
A <sub>260</sub> /A <sub>280</sub>	1.97	1.94	1.95	1.96
A <sub>280</sub> /A <sub>230</sub>	2.09	2.10	2.22	2.26

Figure 1. High performance in yield and purity

Whole blood samples from human and various animals were processed in duplicate and genomic DNA was extracted using GENTi™ Advanced Blood DNA Extraction Kit. Total yield and purity were assessed using a NanoDrop™. Each eluate shows highly pure DNA ratios falling between 1.8~2.0 of 260/280 and 2.0~2.2 of 260/230, indicating that it is ideally suited for next generation sequencing.

Figure 2

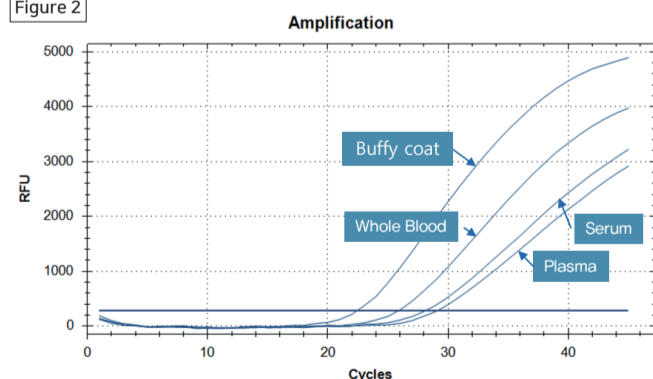


Figure 2. Successful PCR of DNA purified from various sample types  
DNA was purified from challenging sample types including plasma and serum using GENTi™ Advanced Blood DNA Extraction Kit and amplified by real-time PCR. Efficient amplification was achieved with all samples.

Figure 3

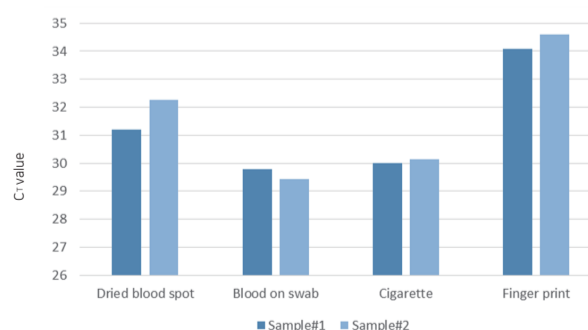


Figure 3. Reliable DNA extraction from forensic samples  
DNA was isolated in duplicates from dried blood spot, blood on swab, cigarette and finger print using GENTi™ Advanced Blood DNA Extraction Kit. DNA yields were determined by qPCR showing reliable extraction and amplification of DNA, even from challenging forensic sample materials.