

# MagaBio Forensic Sample DNA Purification Kit

## Product Introduction

The MagaBio Forensic Sample DNA Purification Kit is suitable for extracting trace amounts of DNA from various forensic samples. It releases nucleic acids from the samples using a unique buffer and lysis system, followed by magnetic bead capture and purification to obtain high-purity DNA. This kit is easy to use, provides high extraction purity, and is compatible with automated extraction platforms. It is suitable for extracting DNA from a wide range of on-site biological evidence, such as soil, chewing gum, cigarette butts, hair, nails, and bodily fluids, with a high recovery rate. The extracted nucleic acids are suitable for various forensic testing applications.

## Specification

Parameters	Description
Sample	Soil, Sludge, Paper, Fabric, Chewing Gum, Cigarette Butts, Hair, Nails, Blood, Saliva, and Tissues
Method	Manual/Automated Instruments
Time	38 min
Compatible Platform	Bioer Nucleic Acid Purification Systems
Storage Condition	2-30 °C for 12 months

## Characteristic

- **Versatile Applicability:** Suitable for DNA extraction from various forensic samples, including challenging materials such as soil, sludge, and more.
- **Simplified Operation:** Suitable for automated extraction with flexible product specifications.
- **High Sensitivity:** Capable of extracting nucleic acids from trace samples with high purity.

## Application Cases

### Case 1

The experiment used the MagaBio Forensic Sample DNA Purification Kit to extract DNA from swabs of cup walls and blood samples from soil. The sample types included whole blood, hair, nail, cigarette butt, chewing gum, and bloodstained fabric strips. The results of the fluorescence quantitative PCR assay are as follows:

CT Value							
	Whole Blood	Hair (without follicles)	Hair (with follicles)	Nail	Cigarette butt	Oral gum	Bloodstained fabric strip
Competitor	20.64	39.30	35.67	26.46	29.40	27.69	23.60
	20.34	36.86	32.22	29.14	32.53	28.45	23.38
Bioer	15.29	36.97	35.95	27.01	30.07	27.33	19.39
	15.62	36.74	35.18	26.38	33.55	28.59	18.77

**Conclusion:** The results indicate that the MagaBio Forensic Sample DNA Purification Kit can extract trace amounts of human DNA from samples such as hair, nails, cigarette butts, and bloodstains, with good extraction efficiency. In comparison to competitor DNA extraction kits, MagaBio's forensic DNA extraction kit shows similar extraction performance. Moreover, it demonstrates higher extraction efficiency for whole blood and bloodstained fabric strips compared to the competitor's kit.

### Case 2

The experiment selected swabs from the mouse surface, water cup surface, and bloodstain on soil as samples. These samples were respectively extracted using the MagaBio Forensic Sample DNA Purification Kit and tested using Bioer fluorescence quantitative PCR assay kit. The results of the detection are as follows:

Sample	CT Value
Mouse	37.26
	36.00
Water Cup Surface	34.48
	34.35
Bloodstain	16.64
	16.30

## Ordering Information

Product Name	Cat. No.	Package	Note
MagaBio Forensic Sample DNA Purification Kit	BSC109T1E	16T	Plate, NPA-32 series
	BSC109S1E	32T	Plate, NPA-32 series
	BSC109S1S	32T	Strip, NPA-32 series
	BSC109S1B	50T	Bottle
	BSC109M1B	100T	Bottle



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Add: 1192 Bin An Rd., Hi-tech (Binjiang) District, Hangzhou, 310053, P.R.China    Web: [www.bioer.com](http://www.bioer.com)  
Tel: +86-571-87774513    Fax: +86-571-87774553    E-Mail: [reagent@bioer.com.cn](mailto:reagent@bioer.com.cn)    E-Date: 2023.10