

# TANBead Forensic DNA Extraction kits

## I. Introduction

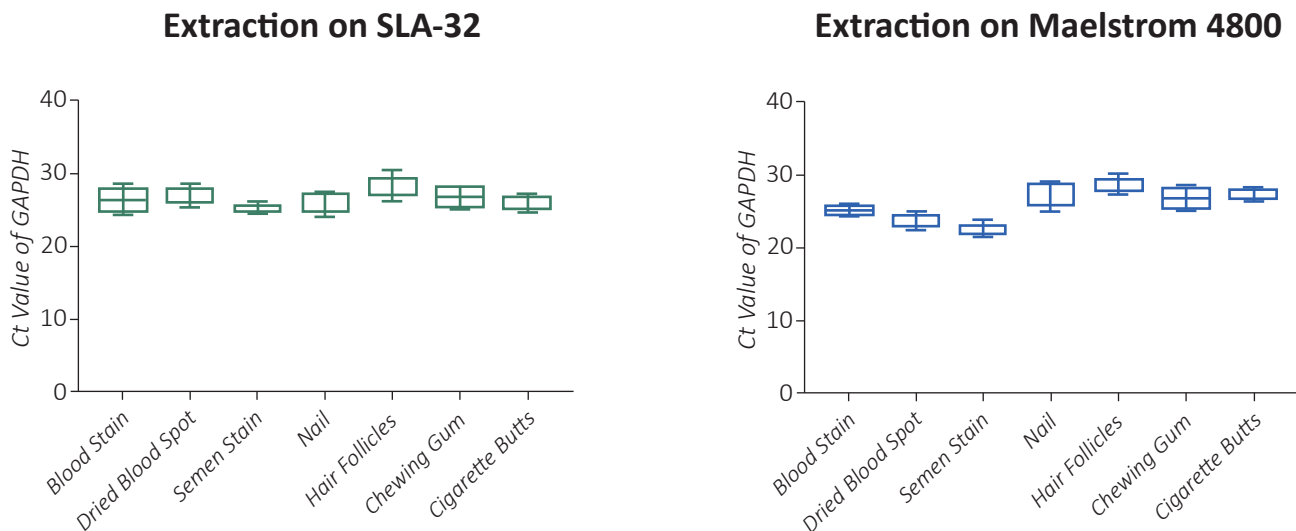
Forensic science is the use of scientific methods or expertise to investigate crimes or examine evidence that might be presented in a court of law. DNA analysis is one of the most powerful investigative techniques for criminal evidence. High purity DNA is necessary for downstream forensic applications such as human identification and other experiments for forensic science. The biological evidence for forensic includes a diverse of samples including human blood, semen, hair, nails, and other touched substrates found in the crime scene.

TANBead Forensic DNA extraction kits are designed to perform fully automated purification of genomic DNA from varieties of samples, such as blood stain, dried blood spot, semen stain, hair, nail, chewing gum and cigarette butts. High-quality genomic DNA extracted from varieties samples is ready for immediate use in downstream applications, such as PCR-based analysis, mitochondria DNA (mtDNA) analysis, STR analysis and other forensic applications.

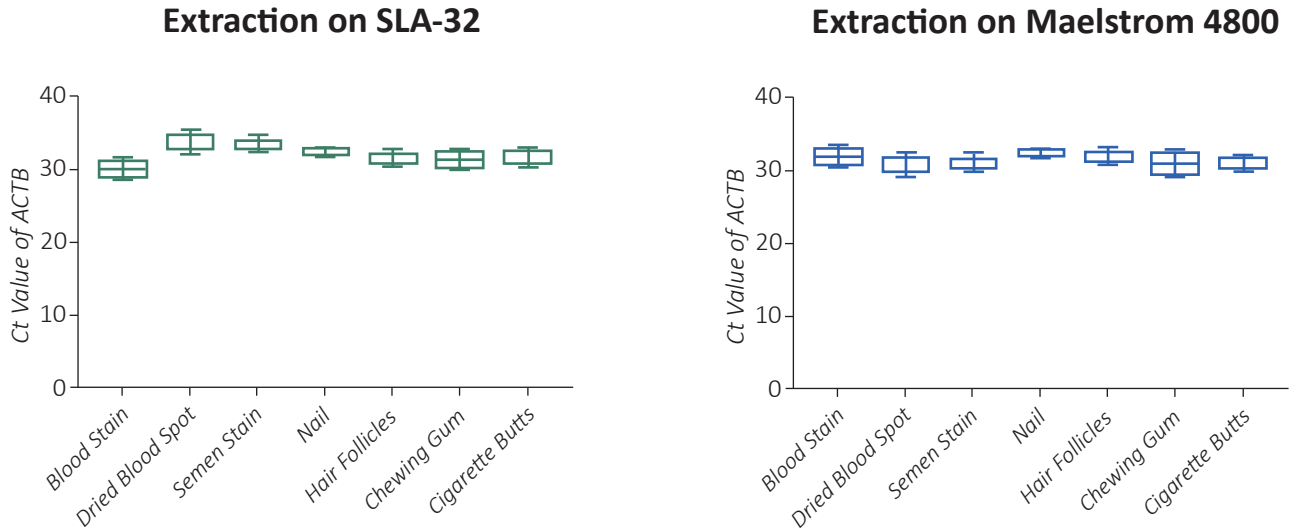
## II. Advantages

- TANBead provide easy operation from 1 to 96 samples, including higher processing volumes in 120 minutes.
- Automation-ready, no organic extraction or ethanol precipitation is required.
- Purified genomic DNA is suitable for multiple downstream applications, such as PCR-based analysis, mtDNA analysis, STR analysis, and other forensic applications.

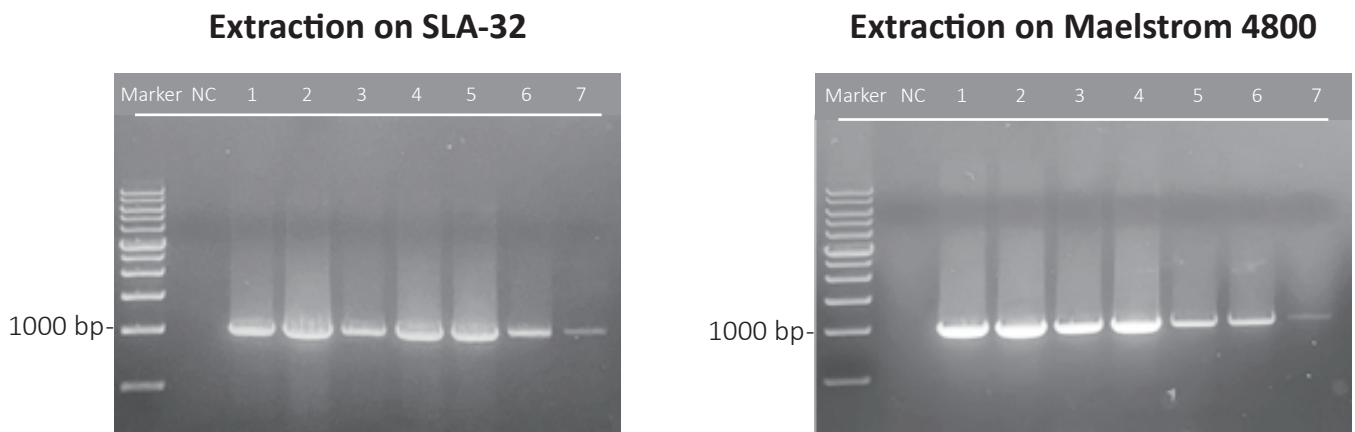
## III. Application data



**Figure 1.** The qPCR results of GAPDH. The nucleic acid was extracted from different samples by TANBead Forensic DNA Extraction Kits and Extractor series. Left: SLA-32 extractor; Right: Maelstrom 4800 extractor (Three replicates with each sample).



**Figure 2.** The qPCR results of ACTB. The nucleic acid was extracted from different samples by TANBead Forensic DNA Extraction Kits and Extractor series. Left: SLA-32 extractor; Right: Maelstrom 4800 extractor (Three replicates with each sample).



**Figure 3.** Agarose gel electrophoresis of nucleic acids extracted from seven different sample types by TANBead Forensic DNA Extraction Kit and Extractor series. Mitochondria DNA was amplified by PCR (Product size: 1200 bp) and 50  $\mu$ L of each sample was loaded on a 1% agarose gel. Marker: Bio-1kbTM Mass DNA Ladder; NC: Negative control; Lane 1: Blood stain; Lane 2: Dried blood spot; Lane 3: Semen stain; Lane 4: Nail; Lane 5: Hair follicles; Lane 6: Chewing gum; Lane 7: Cigarette butts. Left: SLA-32 extractor; Right: Maelstrom 4800 extractor.



#### IV. Specifications

Instrument model	M8 series	M4800 series	SLA series
<b>Input sample</b>	<i>Blood stain / Dried Blood Spot / Semen Stain / Nail / Hair / Chewing gum / Cigarette butts</i>		
<b>Elution volume</b>	80-100 $\mu$ L		
<b>Preparation time</b>	120 mins / 8 samples	120 mins / 48 samples	120 mins / 32 samples
<b>Application</b>	PCR-based analysis, mtDNA analysis, STR analysis		

#### V. Conclusion

The optimized magnetic beads and reagents make TANBead Forensic DNA extraction kits the ideal tool to isolate gDNA with high-quality and high-suitable for many downstream applications in forensic science.

#### VI. Product Information

Model	For Maelstrom 8 AutoStage/48 series		For SLA-32/SLA-E13200	
<b>Product name</b>	TANBead Forensic DNA Auto Plate	TANBead Forensic DNA Auto Tube	TANBead Forensic DNA Auto Plate	TANBead Forensic DNA Auto Tube
<b>REF No.</b>	M6TFA46	M6TFS46	6TFA46	6TFS46
<b>Cat No.</b>	301424	301425	301552	301553
<b>Quantity</b>	96 test/kit	96 test/kit	96 test/kit	96 test/kit



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