

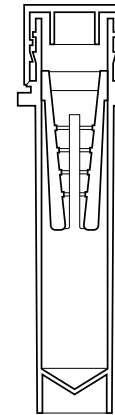
# iSWAB™-ID Technology

## Next-Generation All-in-One Forensics Sample Collection Device

**COLLECT • CONCENTRATE • STABILIZE • RECORD • TRANSPORT • STORE • ANALYZE**

Mawi DNA Technologies' iSWAB™-ID device stabilizes biometric samples at the point of collection—a major advancement over other current tools and methods that helps to overcome hurdles commonly associated with sample storage and analysis.

The collection of biometric or crime scene samples is a key step in the investigation process. However, traditional collection tools such as swabs and FTA cards leave significant room for error or unusable samples. After collection, inadequate resources can often lead to a backlog of several weeks or months to process the samples, therefore increasing the possibility of yielding invalid results.



Patented sample **CONCENTRATION** and **STABILIZATION** technology

### FACTORS WHICH CAN NEGATIVELY IMPACT SAMPLE INTEGRITY INCLUDE THE FOLLOWING:



**BACTERIA OR FUNGI** can grow due to improper storage and transport



**DNA DEGRADATION** by DNases released by collected cells



**OVER-DRYING** of the sample can cause irreversible DNA binding

In addition, there is often not enough evidence to support multiple assays. A collection method that offers stabilization at the point of collection and allows room temperature shipment and long-term storage is critical to maintain samples' integrity.

### THE iSWAB-ID DEVICE PERFORMS SEVERAL FUNCTIONS AT THE POINT OF COLLECTION:

- ✓ **COLLECT** Can be used for the collection of Touch DNA and Reference Samples (e.g. buccal cells, blood spots, sweat, semen, and any other body fluid)
- ✓ **CONCENTRATE AND STABILIZE** Complete release and stabilization of the sample from the swab into the iSWAB tube at the point of collection (no drying time required)
- ✓ **RECORD** Pre-barcoded components to maintain chain of custody
- ✓ **TRANSPORT AND STORE** Room temperature transport and long-term storage
- ✓ **ANALYZE** High DNA recovery allows for several runs of Direct PCR, Genotyping and DNA sequencing (Sanger & NGS)

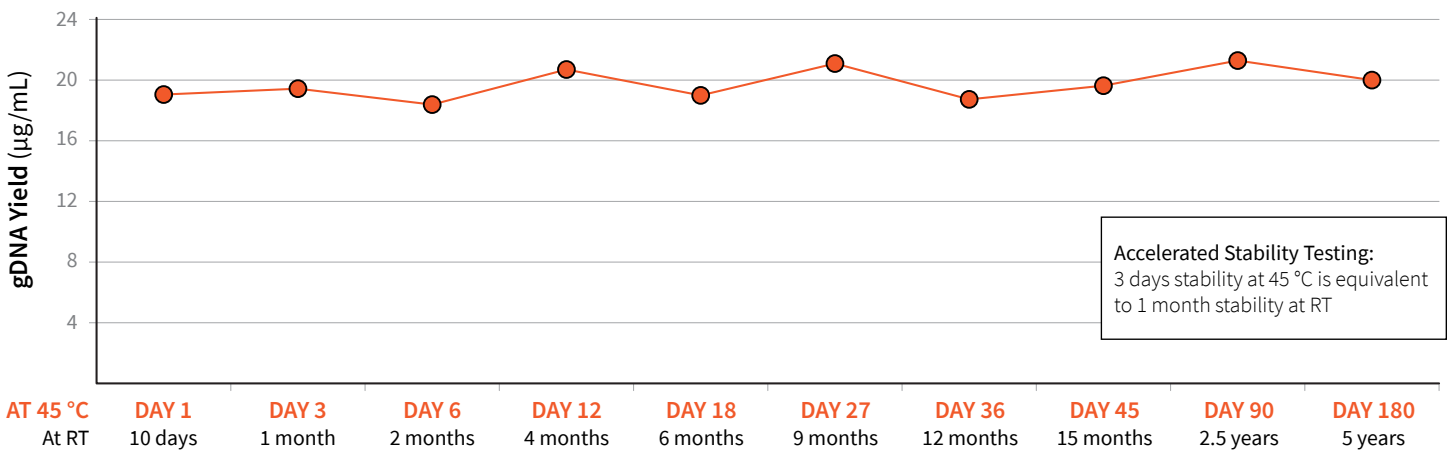
Catalog Number	Description
ISF-T-250	iSWAB-ID Human DNA Collection Tube, 400µl
ISF-T-250-R	iSWAB-ID Human DNA Collection Tube Rack, 400µl x 50
ISWAB-ID-250	iSWAB-ID Human DNA Collection Kit, 400µl

**mawi**

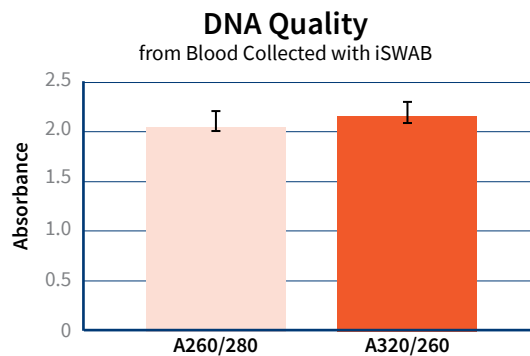
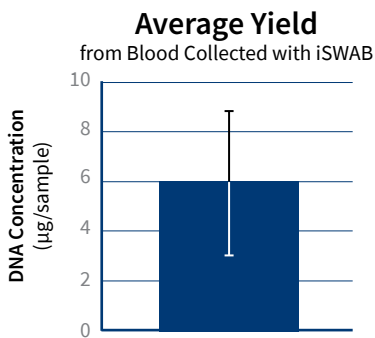
US/Canada: 510-256-5186 | 855-DNA-SWAB

[www.MawiDNA.com](http://www.MawiDNA.com)

## iSWAB Collected Samples are Stable Over Five Years at Room-Temperature



## iSWAB is compatible with Blood Spot Collection and Stabilization



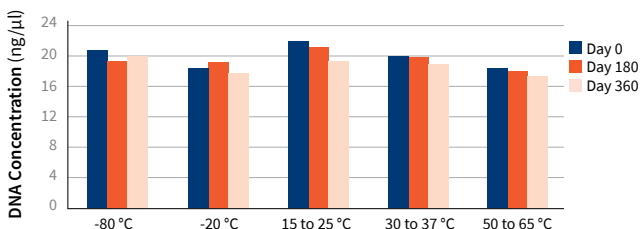
DNA extraction was performed with QiaAMP Blood extraction kit (n=12). The yields are from a single iSWAB tube. Blood drops were collected using 2 cotton swabs. Blood from the swabs was released and suspended in the iSWAB tube. No measurable DNA concentration was obtainable from equivalent volume of blood collected with FTA cards. DNA yields were confirmed with 2 different methods: Nanodrop and picogreen assay.

## High Molecular Weight gDNA from Blood Collected with iSWAB



Agarose gel (0.8%) electrophoresis of gDNA samples isolated from 100 µL of human blood collected with iSWAB-ID-250 using QIAamp Blood kit. 4 µL of 100 µL elute was used for electrophoresis. M: DNA/Hind III+EcoR I

## iSWAB-ID-250 Real Time Stability Testing-Temperature Effect



**iSWAB-ID-250 Preserving Capability.** gDNA yields obtained from a pooled iSWAB-ID sample aliquoted and retained at -80°C, -20°C, 15-25°C, 30-37°C, and 50-65°C for 360 days. Yields remained stable and ranged from 18-22 ng/µL.

The data shown here demonstrate iSWAB-ID's preserving capability to recover high yields of gDNA while maintaining its integrity at a wide range of temperatures (-80°C to 65°C), including typical room temperature range (15-25°C).

Direct PCR-STR Kits  
Compatible with  
iSWAB-ID

Thermo Fisher

AmpFLSTR® Identifiler® Direct PCR Amplification Kit\*

Promega

PowerPlex® Fusion Systems\*

PowerPlex® Y23 System\*

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