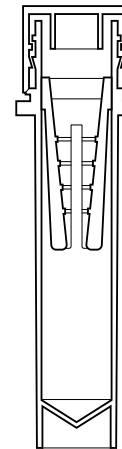


# iSWAB™-Discovery Technology

## Non-Invasive Device for Collection and Stabilization of DNA

The iSWAB-Discovery (DSC) device allows for the collection and stabilization of long-fragment, double-stranded DNA at the point of collection without the need for swab inclusion. Typical yields of between 2-7µg (iSWAB-DSC) of DNA with <1% bacterial contamination can be achieved. The gentle collection and lysis chemistry of the alcohol-free iSWAB buffer allows for recovery of double-stranded, large fragment DNA similar to the genomic DNA generated from blood, making it suitable for complex genomics downstream arrays such as microarrays and Next Generation Sequencing. Other non-invasive collection methods often use alcohol and can produce short DNA fragments, limiting their usability to basic genotyping applications.



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

**GENETIC ANALYSIS** Epigenetics | Epidemiology | Forensics

**VETERINARY TESTING** Genotyping | Breeding | Speciation

**ASSAYS** PCR | Sequencing | Genotyping | Gene Expression

- ✓ **SWAB-FREE SAMPLE TRANSPORT** Decrease processing time without compromising sample integrity.
- ✓ **HIGH DNA YIELD** Up to 7µg (iSWAB-DSC) of double-stranded, long-fragment DNA for use in applications including microarray and NGS.
- ✓ **LOW BACTERIAL CONTAMINATION** > 1% bacterial genomic DNA contamination in sample collection.
- ✓ **ROOM-TEMPERATURE STABLE** Eliminates cold chain requirements, reducing storage and transport costs.
- ✓ **SELF-COLLECTION OR ASSISTED COLLECTION IN <5 MINUTES** Suitable for all population segments including infants, toddlers, and elderly people.
- ✓ **TRACEABLE AND RELIABLE CHAIN OF CUSTODY** LIMS-compatible unique barcodes included on each collection device for efficient traceability and storage purposes.
- ✓ **SCALABLE AND EASY TO PROCESS** Manual and automation friendly sample processing.
- ✓ **CERTIFIED FREE OF HUMAN gDNA AND PCR INHIBITORS**

Catalog No.	Description	Stabilizing Buffer Volume
ISD-T-DSC	iSWAB-Discovery Collection Device,	400µL x 500
ISD-T-DSC-R	iSWAB-Discovery Collection Device Rack ,	400µL x 50
iSWAB-DSC	iSWAB-Discovery Collection Kit,	400µL

**mawi**

Mawi DNA Technologies LLC  
[www.MawiDNA.com](http://www.MawiDNA.com)

26203 Production Ave, Suite 3 | Hayward, CA 94545

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

**EC REP** CEpartner4U [www.cepartner4u.com](http://www.cepartner4u.com)

Esdoornlaan 13 | 3951 DB | Maarn | The Netherlands



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**COLLECT • STABILIZE • CONCENTRATE • TRANSPORT • EXTRACT • STORE**  
**all in a single tube!**

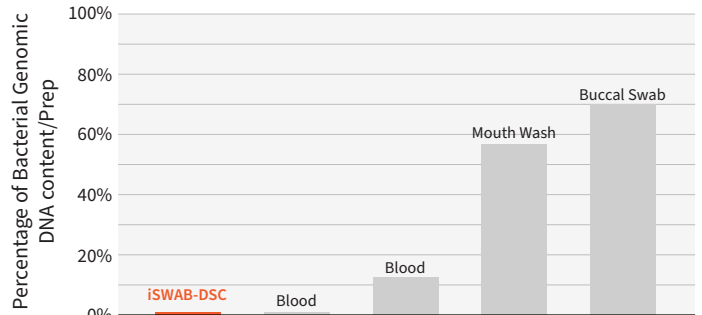
**gDNA CONCENTRATION EXTRACTED**

Comparison of Average gDNA Yields



**<1% BACTERIAL CONTAMINATION**

Comparison of Average Bacterial Genomic DNA Contamination Detected in Different Collection Methods



Primers specific for the 16S ribosomal RNA gene were used as a simple method to obtain relative quantification of bacterial DNA.

**iSWAB-Discovery Features**

Attributes	iSWAB-DSC
Sample Volume	400μL
Swab Needs to Travel with Sample	No
Collection Time	< 5 min
Median Human DNA Yield	2-7 μg
Molecular Weight of DNA	> 23 kb
Bacterial DNA Content	< 1%
Storage and Transport	RT
Stability	Months
Capability to Concentrate Sample	Yes
Suitable for All Population Segments	Yes
Automation Friendly	Yes
Number of Extraction Steps	5
Liquid Sample	Yes
Barcoded	Included
Return Transport Packaging Provided	Yes
Long-term Storage Real Estate	Small

**Compatible RT-PCR and LAMP Assays**

Investigator Quantiplex Kit (Qiagen, Cat. # 387016), Promega PowerPlex 16 HS System (Promega, Cat. # DC2101), EZ1 Advanced XL DNA Investigator Flip-Cap Card (Qiagen, Cat. # 9019933), TaqMan Open Array Genotyping assays | Listed assays were validated for Mawi DNA via 3rd party lab. Contact us if assay being used is not listed.



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DS-0070 (C) iSWAB-DSC Datasheet | Effective Date : 2022-06-24