



# Maxwell<sup>®</sup> FSC System

*Upgraded  
User Experience.  
Same Great  
Performance.*





## The Maxwell® FSC System

The Maxwell® FSC Instrument, along with DNA IQ chemistry, offers easy-to-use, consistent, automated nucleic acid extraction from casework samples such as blood stains, semen stains, hairs, cigarette butts, tissues and trace DNA samples.

*Simplified  
Laboratory  
Workflow  
for All Your  
Sample Types*

Preprogrammed purification methods and proven DNA IQ™ reagents combine with an improved magnet and plunger design and better spin baskets to process up to 16 samples in roughly 30 minutes.

### **Streamline Lab Operations**

Gain efficiency with easy-to-use prefilled reagent cartridges.

### **Use a Range of Sample Types**

Get proven results from a range of challenging casework samples.

### **Set Up a Run Quickly**

Use the intuitive touch-screen interface and preprogrammed protocols to set up a run, minimize variability and save time.

### **Reduce Processing Time**

Extract DNA from 1–16 samples in roughly 30 minutes with minimal preprocessing. New, easy-to-use spin baskets eliminate the need to manually transfer swabs. These baskets perform the sample lysis and separation of solid sample substrates (i.e., swabs, fabrics, etc.) in tandem in a single streamlined procedure.

### **Track Samples Easily**

Critical details such as sample ID, kit ID, and kit lot number can all be recorded with the integrated barcode reader.

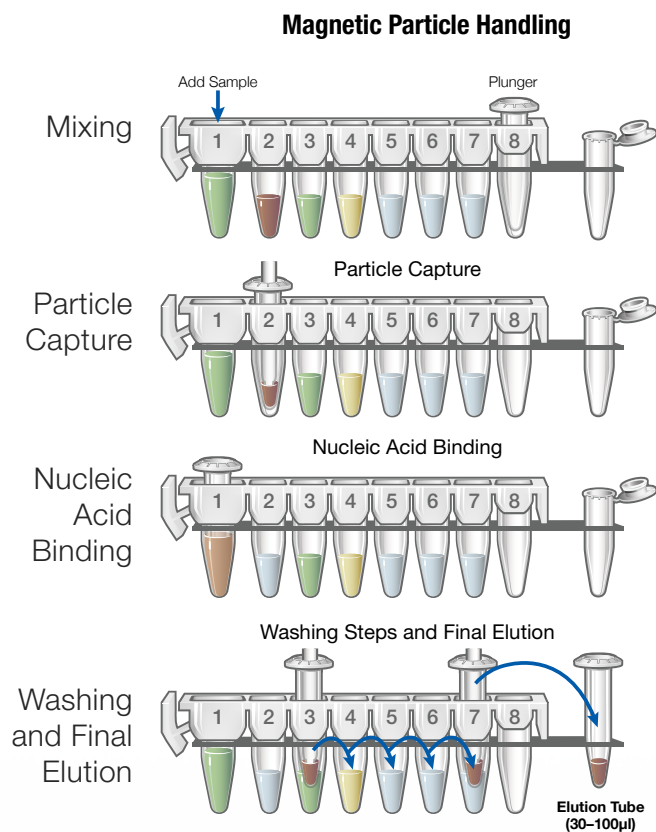
### **Maximize Bench Space**

The compact footprint of the Maxwell® FSC Instrument conserves critical laboratory bench space (see page 7 for dimensions).

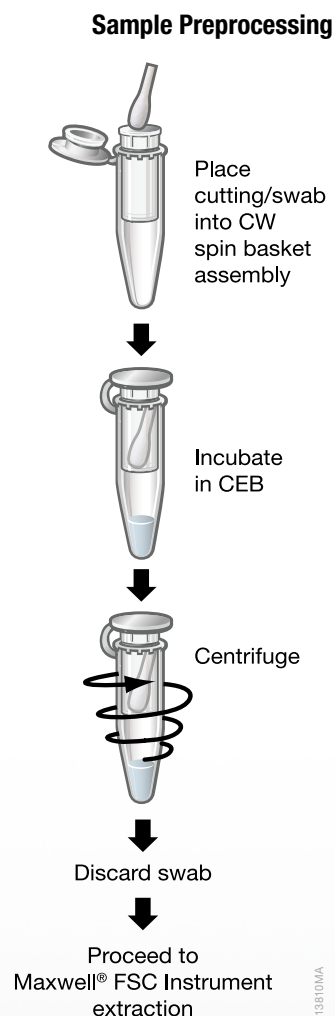


## Be Confident in Your Results

Since the Maxwell® FSC Instrument is a magnetic particle mover, it delivers minimal risk of cross-contamination without the splashing that can happen during processing of samples when using liquid handling systems.



A magnetic bar assembly covered by a plastic sheath (plunger), moves the paramagnetic particles from well to well eliminating clogs, breakdowns and cross contamination.



Preprocessing method for solid samples.

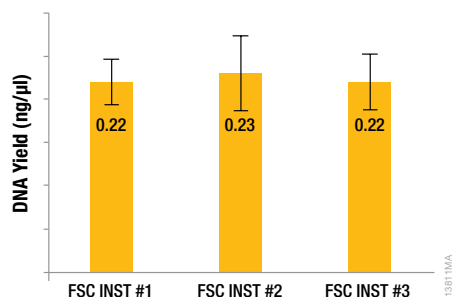


## High-Quality DNA from Casework Samples

The Maxwell® FSC Instrument works with the Maxwell® FSC DNA IQ™ Casework Kit to extract DNA from casework samples. The kit comes with Lysis Buffer, Resin and Wash Buffer contained in the prefilled cartridges. Elution Buffer is also included in the kit to ensure proper storage of the DNA. Prior to performing DNA extraction with the Maxwell® FSC DNA IQ™ Casework Kit, customers should use the Casework Extraction Kit for preprocessing of their samples.

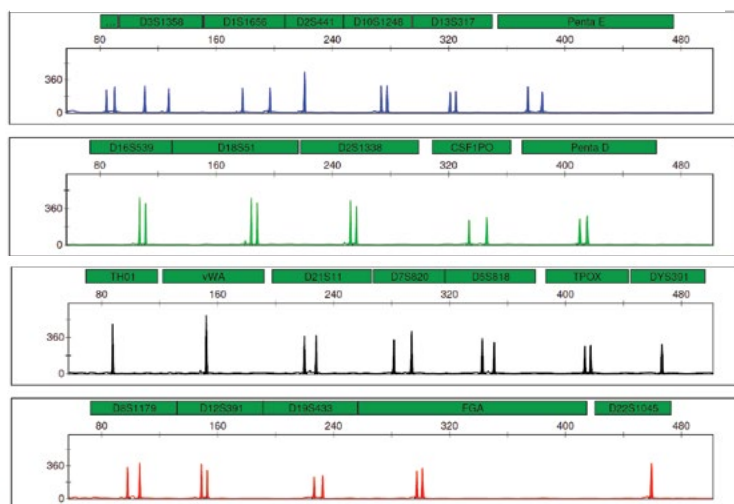
**DNA purified using the Maxwell® FSC Instrument and its associated reagents is ideal for downstream applications such as quantification and STR analysis.**

### Quantification Using the PowerQuant® System



DNA was extracted from 1 µl of blood dried on a cotton swab using the Maxwell® FSC DNA IQ™ Casework Extraction Kit and the Maxwell® FSC Instrument (N = 3).

## STR amplification using the PowerPlex® Fusion 6C System



DNA was extracted from 1µl blood on a cotton swab using the Maxwell® FSC DNA IQ™ Casework Extraction Kit and the Maxwell® FSC Instrument. The PowerPlex® Fusion 6C System was used to amplify 0.5ng of template DNA and the amplification products were separated using an Applied Bio systems® 3100 Genetic Analyzer (3kV, 5-second injection).



## Support and Service Options

The Maxwell® FSC Instrument is backed by a comprehensive one-year standard warranty, an expert service team and a full line of additional service products. With our service and support options, you can be confident that your instrument will be ready when you need it .

- Fixed-Cost Service Products — Predictable support expenditures for simplified budgeting.
- Factory-Trained Service Specialists — Our team offers consistent and reliable service.
- Comprehensive Service and Support — Promega helps ensure that your equipment is working properly and is ready when you need it.

SERVICE AGREEMENT BENEFIT	STANDARD	PREMIER
Period	Renewable annually	Renewable annually
Parts and Labor	Yes	Yes
Shipping	Yes	Yes
Loaner Instrument	Yes, 5–7 business days	Yes, 24 hours*
Field Support	No	Yes, 48 hours*
Annual Preventive Maintenance	No	Yes, 1 per 12 months

*Our standard and premier service packages allow you to choose your level of support after the warranty period expires.*

\*Where available

# Specifications, Components and Ordering Information

## Specifications

Processing Time: 30 minutes
Number of Samples: Up to 16
Weight: 24.2lb (11kg)
Dimensions (W × D × H): 13 × 13.6 × 11.8 inches (330.2 × 345.2 × 299.7mm)
Power Requirements: 100–240VAC, 50/60Hz, 2.5A
Fuse: 250VAC, 2.5A, low breaking capacity, time-lag fuse (AC250V, T2.5AL, 5 × 20mm)
UV Bulb: Average lifetime approximately 6,000 hours, length 135.9mm, diameter 16mm, 4W, 0.17A current, 29V, spectral peak F 253.7, UV output 0.9W

## Instrument Standard Components

1 Maxwell® FSC Instrument, with integrated barcode reader
1 Tablet PC preloaded with Maxwell® FSC Application Software
1 USB Cable for connection of the Maxwell® FSC Instrument to the Tablet PC
1 Power Cable for Maxwell® FSC Instrument
1 Power Cord for Tablet PC
1 Maxwell® Sample Concentrator Deck Tray
1 UV Bulb (installed)
1 Tablet PC Holder
1 Quick Start Guide
1 Setup Guide

## Ordering Information

Product	Size	Cat.#
Maxwell® FSC Instrument	each	AS4600
Maxwell® FSC DNA IQ™ Casework Kit	50 preps	AS1550
CW Spin Baskets	50/pk	AS8101
CW Microfuge Tubes, 1.5ml	50/pk	AS8201
Casework Extraction Kit	100 preps	DC6745


For more information visit:

[promega.com/MaxwellFSC](http://promega.com/MaxwellFSC)



## The Power to Solve

Preprocessing & Differential Extraction	DNA Isolation	Human-Specific DNA Quantitation	STR Amplification
<p>» <b>Differex™ System</b> </p> <p>Easy separation of sperm and epithelial fractions</p> <p>» <b>Slicprep™ 96 Device</b></p> <p>Disposable device for high-throughput sample processing directly from solid supports</p> <p>» <b>Preprocessing Buffers</b></p> <p>Specialized buffers for bone, tissue and hair</p>	<p>» <b>DNA IQ™ System</b> </p> <p>Automatable purification of DNA free of PCR inhibitors</p> <p>» <b>Maxwell® FSC Instrument</b></p> <p>A compact, plug-and-play instrument for automated DNA extraction</p> <p>» <b>Maxwell FSC DNA IQ™ Casework Extraction Kit</b></p> <p>Optimal extraction of DNA from forensic casework samples</p> <p>» <b>Casework Extraction Kit</b></p> <p>A preprocessing reagent designed to help extract DNA from challenging forensic casework samples</p>	<p>» <b>PowerQuant® System</b></p> <p>A 5-dye, 4-target hydrolysis probe-based quantitative PCR assay for assessing total human and male DNA concentrations, degradation levels and the presence of inhibitors</p> <p>» <b>Plexor® HY System</b> </p> <p>Quantitative PCR for both total human and Y-chromosomal DNA in a single reaction</p>	<p>» <b>PowerPlex® Fusion 6C System</b> </p> <p>A rapid 27-plex, including SE33, suitable for casework and databasing testing and designed to meet the new CODIS recommendations</p> <p>» <b>PowerPlex® Fusion System</b> </p> <p>A rapid 24-plex suitable for casework, paternity and database testing and designed to meet the new CODIS recommendations</p> <p>» <b>PowerPlex® ESX and ESI Fast Systems</b> </p> <p>Rapid human identification STR assays that meet ENFSI recommendations for use in casework, paternity and database testing</p> <p>» <b>PowerPlex® 18D System</b> </p> <p>A rapid 18-plex for database and paternity testing (includes CODIS loci), optimized for direct amplification</p> <p>» <b>PowerPlex® 21 System</b> </p> <p>A fast and flexible 21-plex for casework, paternity and database testing</p> <p>» <b>PowerPlex® Y23 System</b> </p> <p>Male-specific STR genotyping kit with 23 Y-STR loci; includes protocols for both casework and databasing</p> <p>» <b>PowerPlex® CS7 System</b> </p> <p>A supplementary multiplex for relationship testing</p> <p>» <b>SwabSolution™ Kit, PunchSolution™ Kit and 5X AmpSolution™ Reagent</b></p> <p>Rapid processing solutions for analyzing database, paternity and reference samples</p>

 **Identity Automation™** • Fully developed and tested high-throughput solutions with Promega installation, training and support



Automation



Chemistry



Software

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