

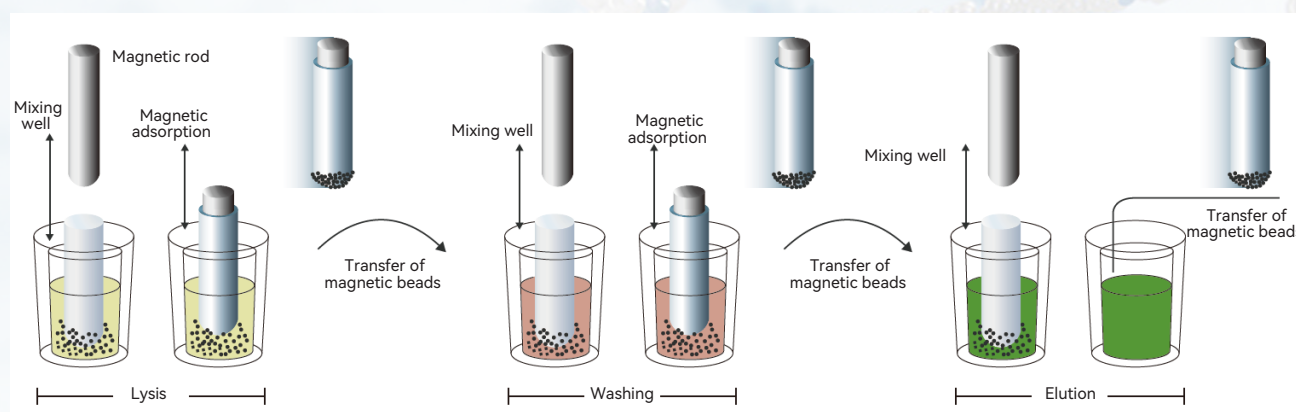
Automated Nucleic Acid Extractor  
**GenoScout EM**



## Product Introduction

The Automated Nucleic Acid Extractor (GenoScout EM) is a high-throughput, high-precision device designed for nucleic acid extraction. It is paired with pre-packaged extraction reagents based on superparamagnetic silica-coated magnetic beads. This enables the extraction and purification of nucleic acids from a variety of biological samples, including blood, tissue, cells, body fluids, bacteria and viruses. The system realizes the purification and enrichment of nucleic acid through the adsorption, transfer, and release of magnetic beads by magnetic rods. Characterized by rapid and user-friendly operation with a high level of automation, the system is widely applicable in the fields of molecular diagnostics and animal disease detection.

## Technical Principle



In the lysis buffer, cells or pathogens are disrupted, releasing nucleic acids. Nucleic acids are adsorbed onto the magnetic beads through hydrogen bonding or electrostatic interactions.



In the lysis buffer, cells or pathogens are disrupted, releasing nucleic acids. Nucleic acids are adsorbed onto the magnetic beads through hydrogen bonding or electrostatic interactions.



In the lysis buffer, cells or pathogens are disrupted, releasing nucleic acids. Nucleic acids are adsorbed onto the magnetic beads through hydrogen bonding or electrostatic interactions.

## Product Advantages



### High Extraction Efficiency

The extractor is made of permanent magnet material with strong magnetic force for magnetic bead adsorption, effectively avoiding the problem of residual magnetic beads.



### Simple and Efficient Operation

Simply add the samples, and the system will perform fully automated operations, completing the extraction of 32 samples in just 10 minutes.



### Flexible and Easy to Use

The device is equipped with a touchscreen operating system, preset programs, and a one-button start, enabling simultaneous extraction of DNA/RNA.



### Precise Design

The system has a deep-well heating block for more accurate temperature control and a lead screw design for high operational precision and enhanced stability.



### Effective Contamination Prevention

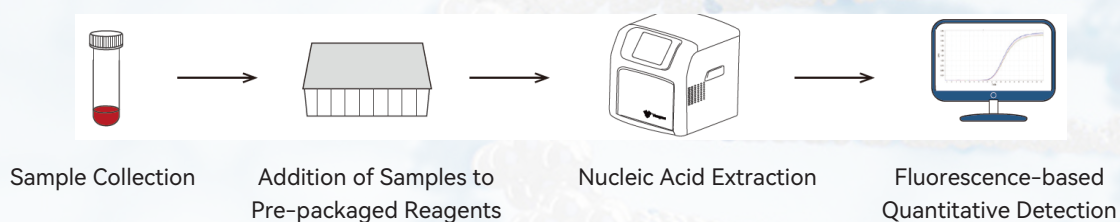
The system is equipped with built-in UV sterilization and a HEPA filtration system to reduce the risk of contamination, and the shut-down time is customizable.



### Power-off Protection

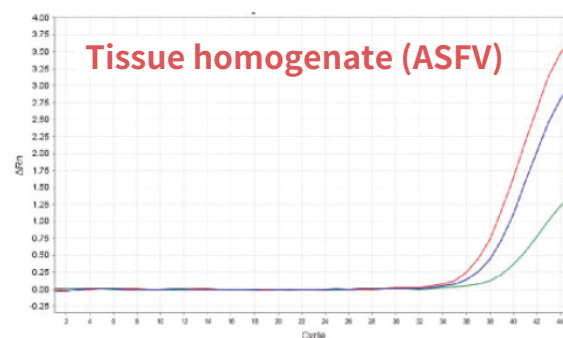
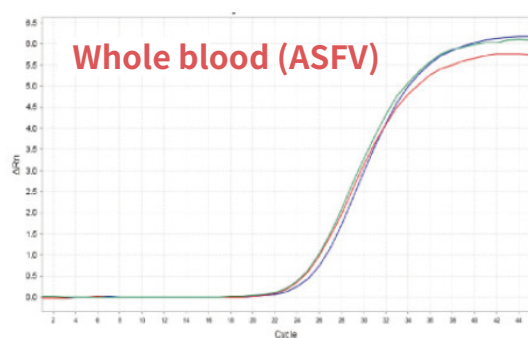
The system can continue to operate after power restoration, avoiding sample waste caused by midway power failure.

## Experimental Procedure

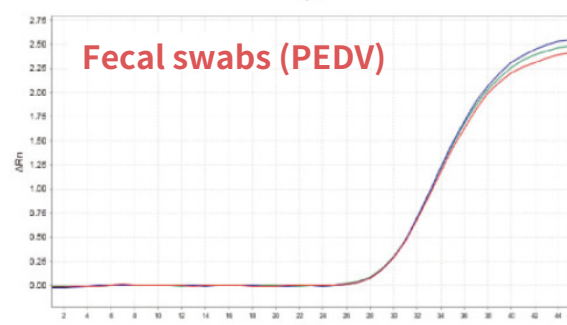
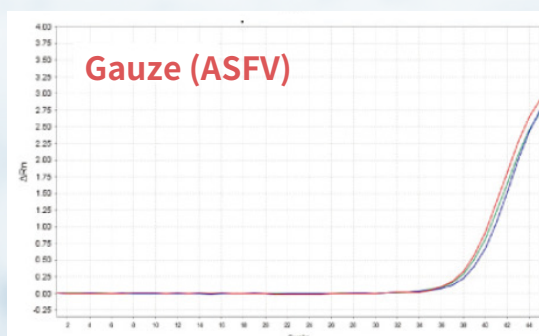


## Experiment Case

### Wide Sample Compatibility Range

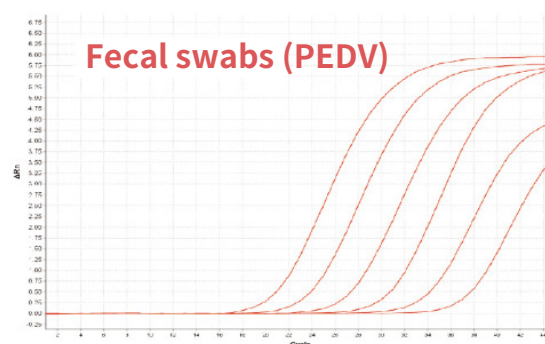
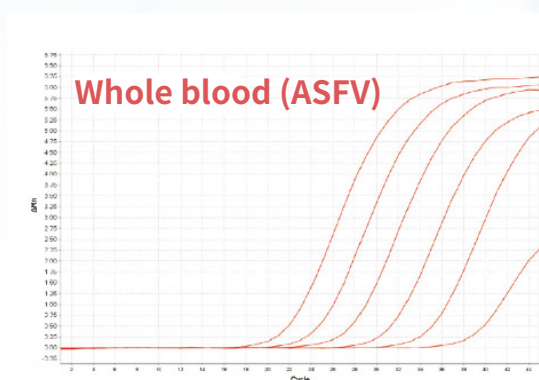






Three different brands of automated nucleic acid extraction solutions were used to extract nucleic acids of African swine fever virus (ASFV) from pig whole blood, tissue homogenate and gauze, and nucleic acids of porcine epidemic diarrhea virus (PEDV) were extracted from fecal swabs, followed by fluorescence-based quantitative detection. Based on the results, GeneMind Automated Nucleic Acid Extractor (GenoScout EM) is better compatible with a variety of sample types and demonstrates excellent performance in multiple sample types.

## High Extraction Efficiency



Nucleic acids of African swine fever virus (ASFV) from pig whole blood and nucleic acids of porcine epidemic diarrhea virus (PEDV) from fecal swabs were extracted using GeneMind GenoScout pre-packaged Blood DNA Extraction Kit (Cat No. L000109), followed by fluorescence-based quantitative detection. The results indicate that GeneMind extraction kit can efficiently extract nucleic acids from samples of various concentrations, with a good linear relationship.



## Ordering Information

Catalogue Number	Product Name	Specification
M000024	Automated Nucleic Acid Extractor (GenoScout EM)	RUO
M000025	Automated Nucleic Acid Extractor (GenoScout EM)	CE-IVD
M000024	GenoScout pre-packaged Cell-Free DNA Extraction Kit	96 RXN, RUO
M000025	GenoScout pre-packaged Blood DNA Extraction Kit	96 RXN, RUO

## Product Parameters

Product Name	Automated Nucleic Acid Extractor
Model	GenoScout EM
Sample throughput	1-32
Treated volume	20-1,000 $\mu$ L
Consumables used	96-deep-well plate + magnetic rod sleeve
Purification well-to-well variation	$\leq 5\%$
Operating humidity range	10%-90%
Operating temperature range	10-40°C

## Product Parameters

Product Name	Automated Nucleic Acid Extractor
Heating temperature control range	Heating temperature during lysis: From room temperature to 120°C; heating temperature during elution: From room temperature to 120°C.
Temperature accuracy	±1°C
Oscillation mixing	Adjustable multi-gear, compatible with different reagent integration solutions.
Sterilization and decontamination methods	UV lamp, HEPA filtration system and anti-aerosol fan
Operating system	Chinese/English operating system
Operation interface	8-inch color touchscreen, compatible with external mouse
Internal program	Capable of storing >500 sets of programs
Program management	Capable of creation, editing, saving as, and deletion of model programs; flexible and free program editing
Port mode	3 USB ports (Type A), 1 Ethernet port, and 1 DB9 debugging port
Network	Wireless WiFi
Input power supply	AC 100-240 V, 50 Hz/60 Hz, 500 W
Power-off protection	Yes
Dimension (W × D × H)	412 mm × 410 mm × 430 mm
Weight	30 kg



### GeneMind Biosciences Co., Ltd.

Technical Support: +86-400-822-3660

Website: en.genemind.com Email: info@genemind.com

Address: Room 502A/502B/602, Luohu Investment Holding Building, 112 Qingshuihe 1st Road, Luohu District, Shenzhen, Guangdong, China

