

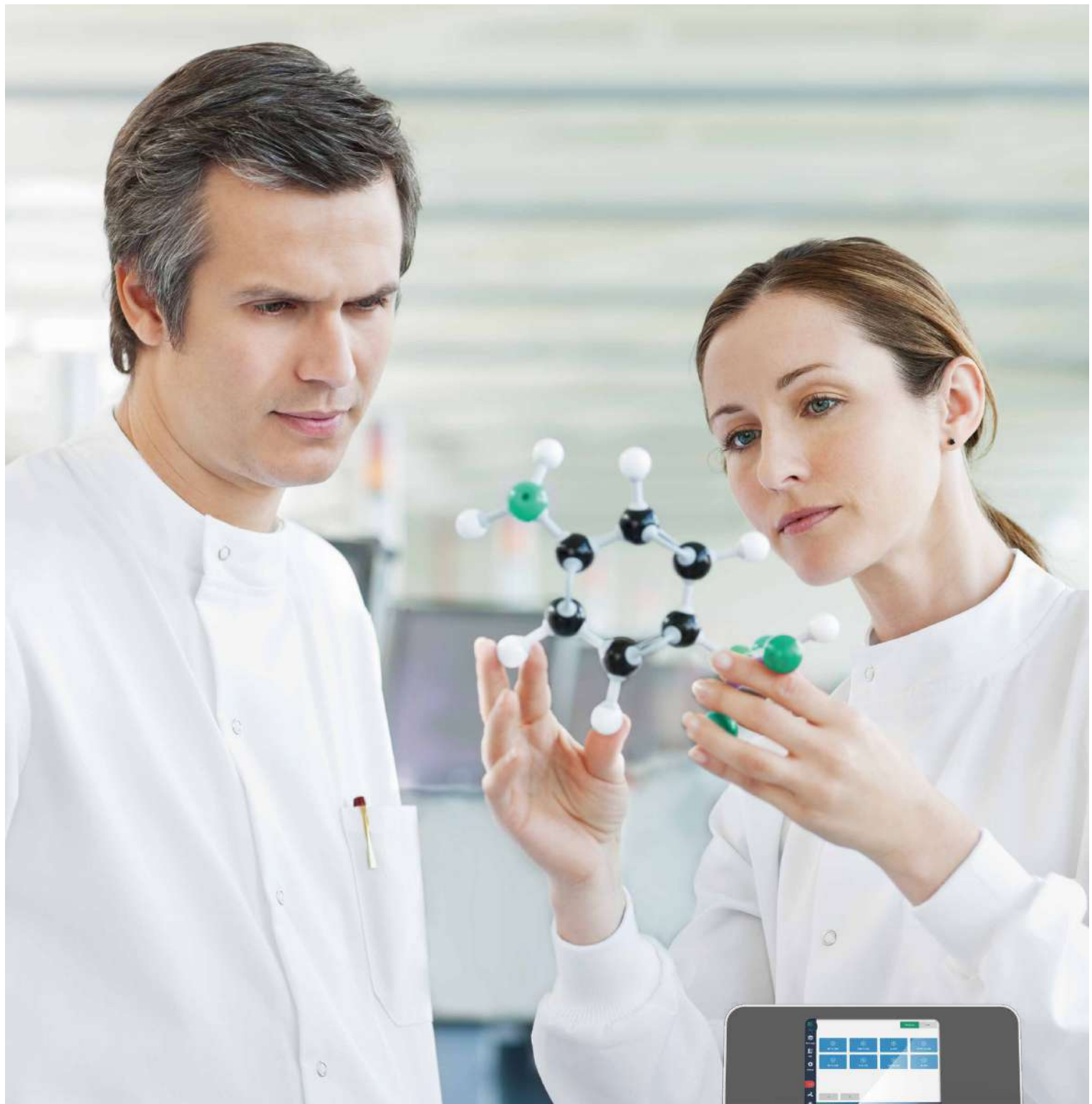


# Nucleic Acid Isolation System

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(EXM3000)



Molecular

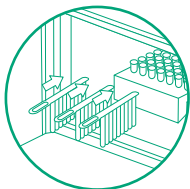


### Nucleic Acid Isolation System (EXM3000)

Nucleic acid isolation system EXM3000 can be widely used in scientific research, clinical diagnosis, disease control and prevention, food safety detection, forensic science and other fields. With the matching reagents kit of Zybio, it can quickly extract nucleic acids in different samples such as whole blood, serum, plasma, throat swabs, secretions, exfoliated cells, urine, sputum, stool and FFPE tissue. The nucleic acid extraction of 32 samples can be completed in 9 minutes, which can significantly shorten the whole PCR detection time.

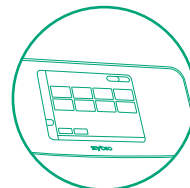


# Features



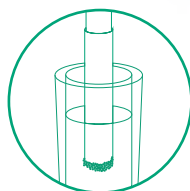
## Intelligent and Efficient

- The software reminds whether the magnetic sleeve is inserted correctly to ensure that the magnetic rod is not contaminated
- Alarm reminder for abnormal failure



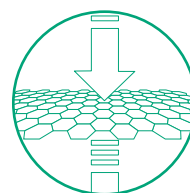
## Easy Operation

- 8.4 inch HD touch screen
- Contains 5 sets of preset programs to meet the needs of basic programs
- With prefilled reagent kit to reduce the operation process and time



## Excellent Performance

- Magnetic flux is up to 5500 GS, avoid the risk of magnetic bead down
- The extraction program is editable and more 500 programs can be stored

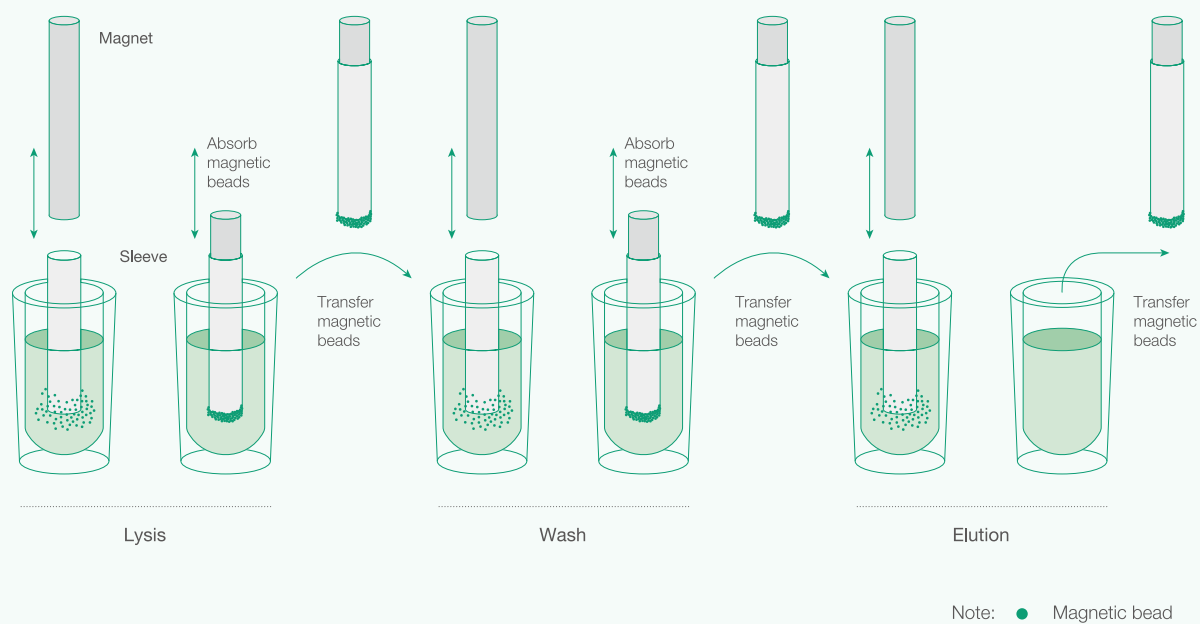


## Safety and Reliable

- Equipped with ventilation facilities and negative pressure exhaust function
- Equipped with HEPA filter and filter element to ensure operator safety
- After extraction, automatic UV sterilization reminder

# Principle

The isolation system uses the magnet on the experiment cabin to move the magnetic beads adsorbed with nucleic acid to different reagent wells, quickly and repeatedly stir the liquid using the magnetic sleeve to make the magnetic beads and liquid evenly mixed. After lysis, nucleic acid adsorption, magnetic beads transfer, wash and elution, high-purity nucleic acid product are finally obtained. The extracted and purified nucleic acid can be used in the following PCR amplification detection and construction of second generation sequencing library.



## Provide complete pre-treatment solution for molecular diagnosis

| Name                                                 | Model          |
|------------------------------------------------------|----------------|
| Nucleic Acid Extraction Kit<br>(MagneticBead Method) | Virus          |
|                                                      | Bacteria       |
|                                                      | Whole blood    |
|                                                      | FFPE           |
|                                                      | Stool          |
|                                                      | cell-free DNA* |

# Technical parameters

|                          |                                                      |
|--------------------------|------------------------------------------------------|
| Working principle        | Magnetic bead method                                 |
| Throughput               | 1-32                                                 |
| Process volume           | 30 μL—1000 μL                                        |
| Number of magnetic rod   | 32                                                   |
| Recovery rate            | ≥98%                                                 |
| Stability                | CV≤3%                                                |
| Lysis temperature        | RT~105°C                                             |
| Elution temperature      | RT~105°C                                             |
| Temperature precision    | ±1°C                                                 |
| Mixing mode              | Multi-mode and multi-speed adjustable                |
| Operation interface      | 8.4 inch touch screen                                |
| Program storage capacity | ≥ 500                                                |
| Program management       | New, edit, save as, delete; support shortcut program |
| Connectivity             | Standard USB, ethernet                               |
| Pollution control        | UV light                                             |
| Exhaust way              | By fan                                               |
| Filtration               | HEPA Filter                                          |
| Data storage             | Available, built-in SD card                          |
| Max. input power         | 500VA                                                |
| Dimensions(L*W*H)        | 375mm*415mm*440mm                                    |
| Weight                   | 27kg                                                 |

| Reagent kit    | Extracted time | Sample volume                   | Performance        | Sample type                                                                                   | Subsequent use                                |
|----------------|----------------|---------------------------------|--------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------|
| Virus          | 9 min          | 100~200 μL                      | Recovery rate≥ 90% | Serum, plasma, urine, tissue fluid, swabs, secretion                                          | qPCR, hybridization, sequencing               |
| Bacteria       | 12 min         | 100~200 μL                      | Recovery rate≥ 90% | Serum, plasma, urine, tissue fluid, swabs, secretion, cell cultures, sputum, pleural effusion | qPCR, hybridization, sequencing               |
| Whole blood    | 24 min         | 100~200 μL                      | A260/280≥ 1.7      | Whole blood                                                                                   | qPCR, hybridization, sequencing               |
| FFPE           | 15 min         | 3~5 sections<br>(4~10 μm thick) | A260/280(1.7-2.1)  | Paraffin section, frozen tissue section, fresh tissue                                         | ARMS-PCR, qPCR, sequencing                    |
| Stool          | 15 min         | 200 mg                          | A260/280(1.7-2.1)  | Various solid or liquid stool samples                                                         | qPCR, hybridization, methylated PCR           |
| Cell-free DNA* | 25 min         | 200-5000 μL                     | Recovery rate≥ 90% | Serum, plasma                                                                                 | qPCR, high-throughput sequencing, digital PCR |