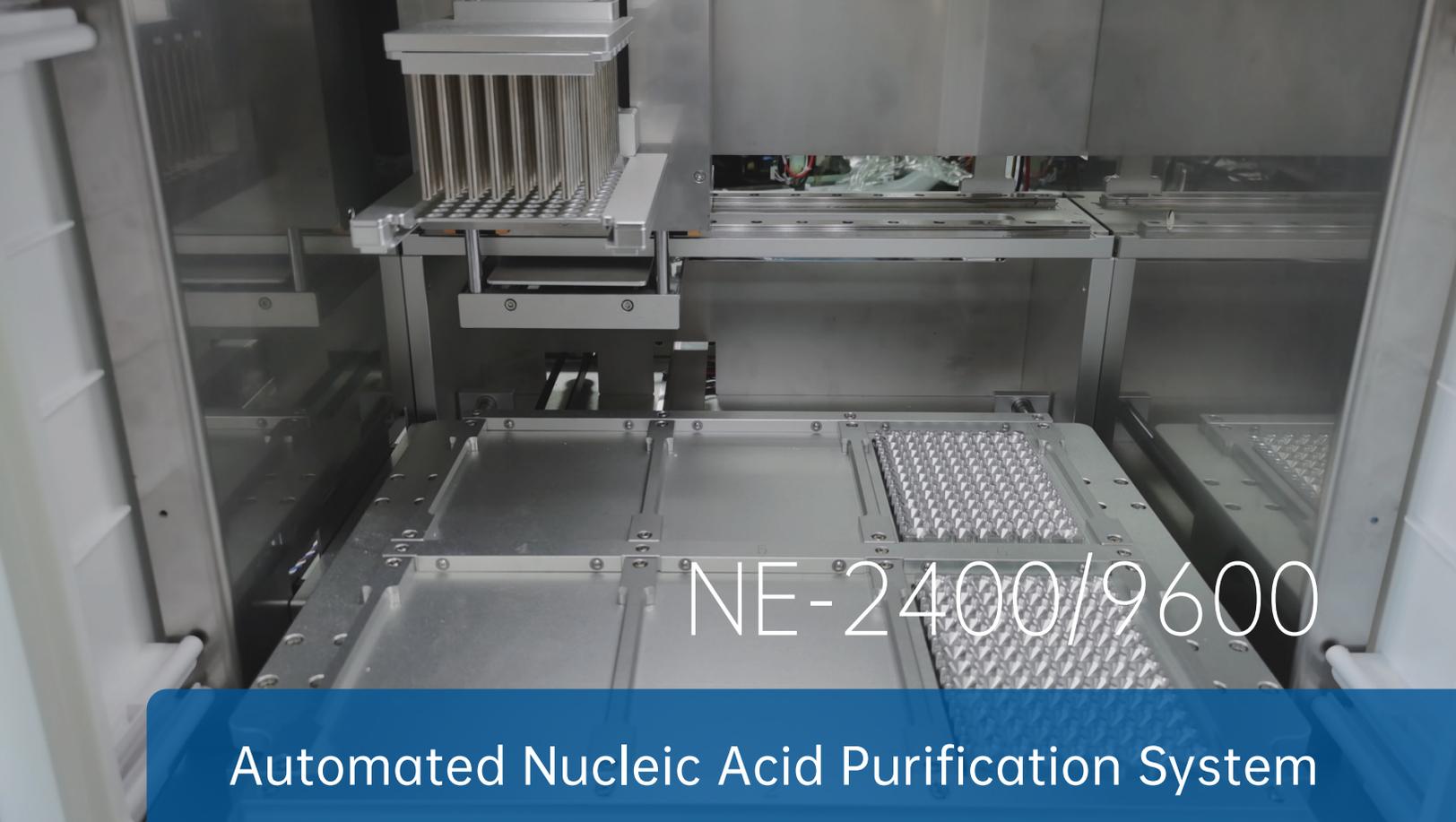


Automated Sample Preparation System

Wondfo NE-2400/9600 Nucleic Acid Extractor

Extract and purify nucleic acid from clinical specimens.
Suitable in PCR laboratory, CDC, insitute and medical settings.





NE-2400/9600

Automated Nucleic Acid Purification System

PRODUCT FEATURES

- **User-friendly**

10.1 inch touch screen for easier operation

- **Intelligent**

Continue testing after power off and re-start to avoid wasting reagent and specimen

- **Safe and reliable**

Hatch opening sensing

UV lamp, negative pressure with HEPA filtration, anti-drop baffle design effectively prevent cross contamination.

- **Open system**

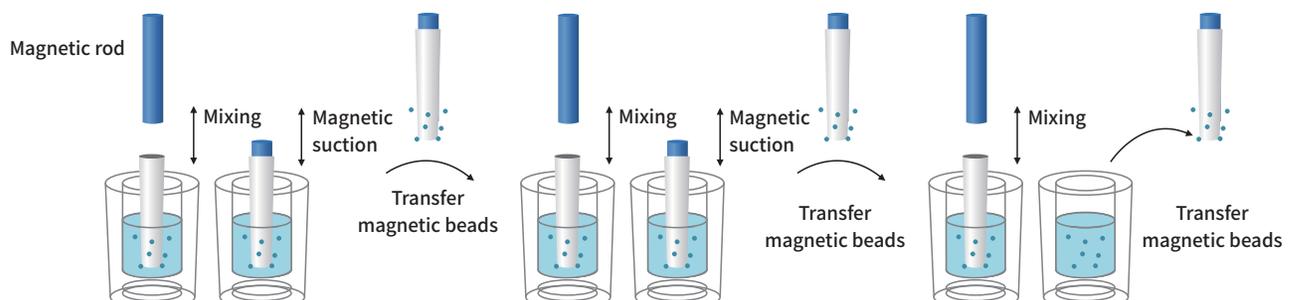
10 adjustable running speeds, good compatibility with consumables

- **Small size**

Width only 460mm

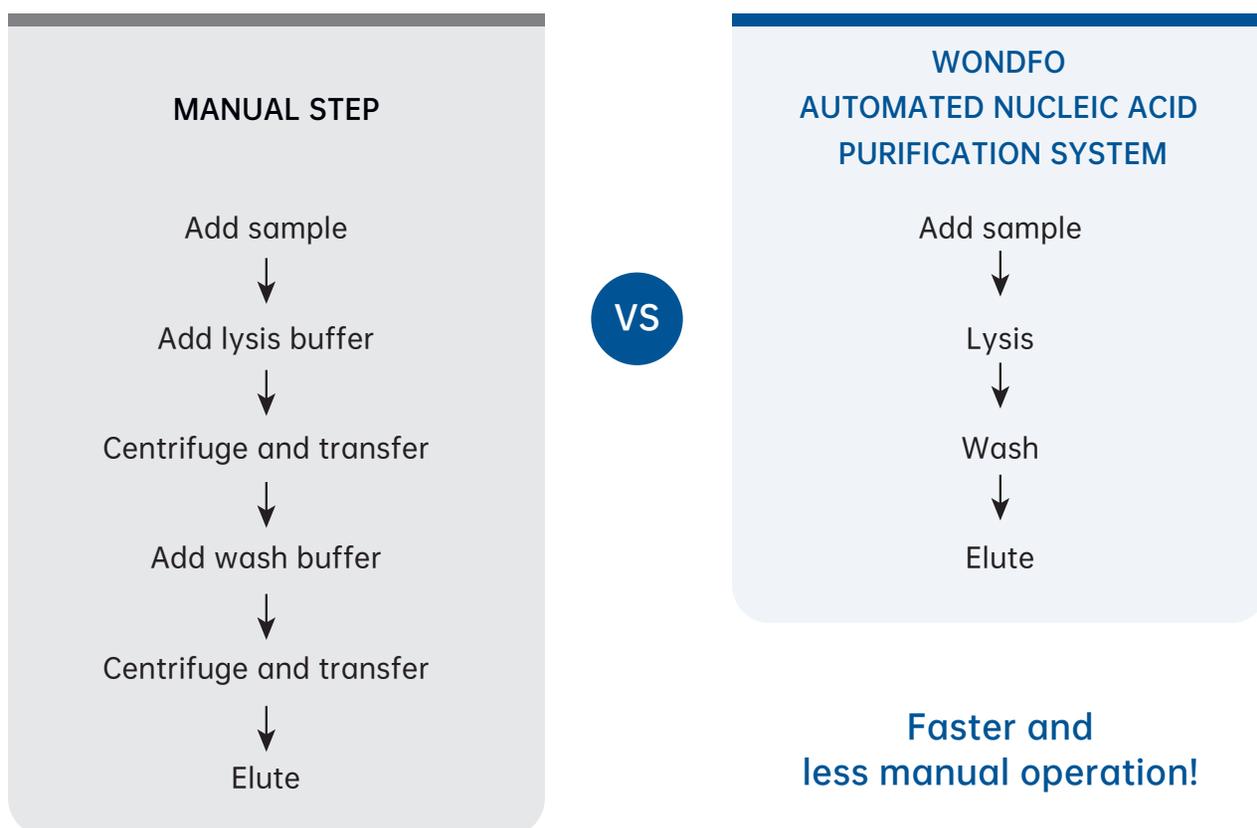
Compact size for less lab space

PRINCIPLE



FAST AND EFFICIENT

Compared to manual preparation or other sample preparation instruments, Wondfo Automated Nucleic Acid Purification System saves manual steps, reduces sample processing time and lowers the human error rate in experiments by automating the process. Wondfo Automated Nucleic Acid Purification System can isolate viral RNA from 96-well plates in just 12 minutes. 1,000-2,000 samples can be easily processed in a lab in 8 hours a day using 1 instrument.



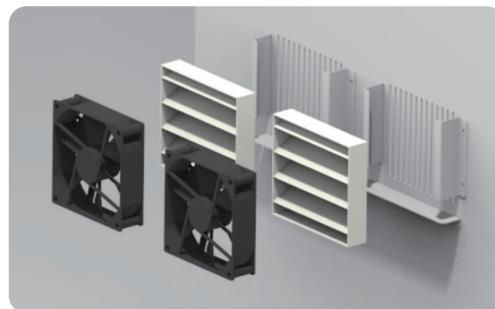
Time difference among automated nucleic acid purification system:

| | Wondfo | Company T | Company R | Company Q |
|--------------|---------------------------------|------------------|-----------|------------|
| Working time | DNA:12-30min RNA,cfDNA:30min | DNA/RNA:25-65min | 50~90min | 70 ~ 90min |

Automated Nucleic Acid Purification System (NE-2400/9600)

CLEAN AND SAFE

- Closed working space.
- Sterilization and filtration double protection create efficient and clean maintenance system to protect microbial samples from particle and aerosol contamination and to guarantee operator safety.



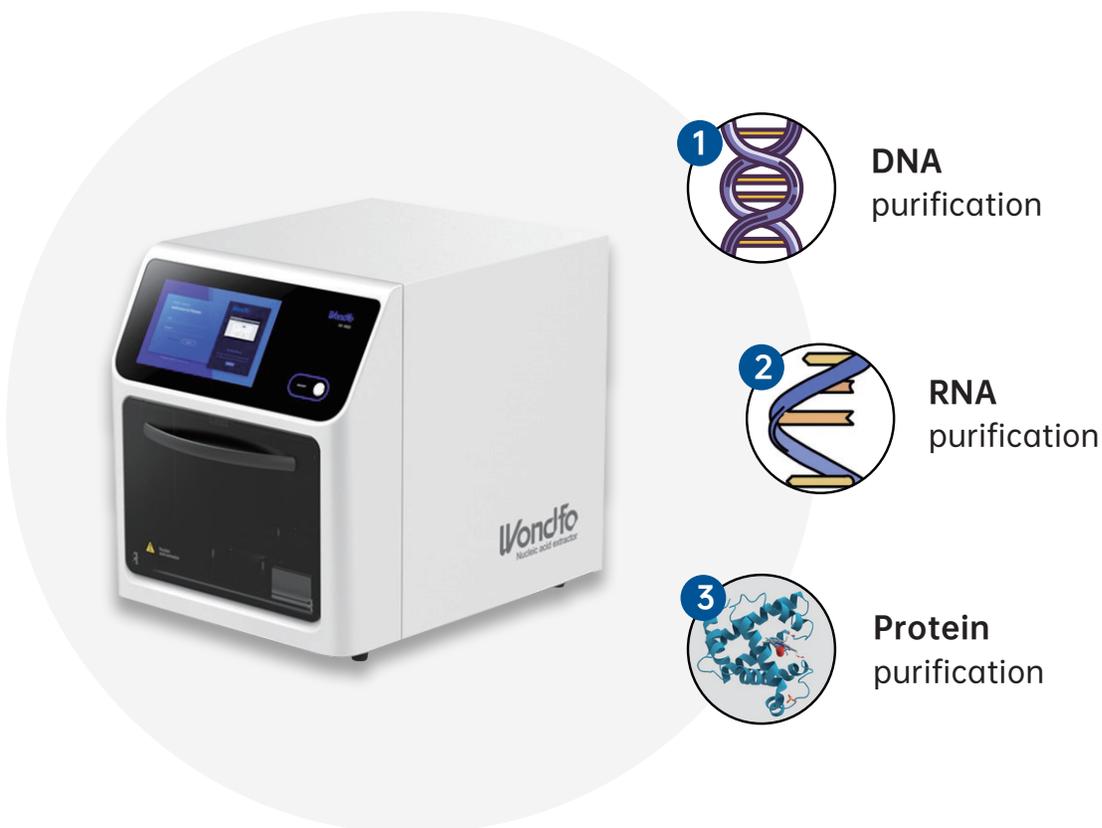
SIMPLE AND USER-FRIENDLY

- Compact and space-saving
- Color touch screen for fast operation

Comparison with other marketed nucleic acid purification system :

| Device | Wondfo NE-2400/9600 | KingFisher Apex System | MagNA Pure 96 | QIA symphony SP |
|----------------|---|---|--|---|
| |  |  |  |  |
| Manufacturer | Wondfo Biotech | ThermoFisher | Roche | QIAGEN |
| Method | Magnetic bead method | Magnetic bead method | Magnetic bead method | Magnetic bead method |
| Dimension | 46x59x53cm | 45x78x59cm | 130x80x100cm | 130x103x75cm |
| Space (m2) | 0.27 | 0.35 | 1.11 | 1.32 |
| Weight | 43KG | 56KG | 235KG | 175KG |
| Heating module | ✓ | ✓ | ✓ | ✓ |
| Specime volume | 100-400ul (96 wells) 0.5-5ml (24 wells) | 30-200ul (96wells) 200-1000ul (24 wells) | 50-1000ul | 200-1000ul |
| Throughput | 24/96 | 24/96 | 96 | 24 |
| TAT | 12-30min | ~65min | ~90min | ~240min |

WIDE RANGE OF APPLICATION



Support various types of specimens



Animals/Human

Liquid biopsies
Tissue



Plant

Root
Leaf
Stem



Microbiology

Gram-positive bacteria
Gram-negative bacteria
Fungi



Cell culture



FFPE specimen

Nucleic Acid Extraction Kit

The technology of Wondfo Nucleic Acid Extraction Kit adopts superparamagnetic particles as the substrate and encapsulates silanol or carboxyl groups on its surface to make the particles specifically adsorb with nucleic acids, thus achieving the purpose of purifying nucleic acids.



Multiple Specimen Types

Whole blood, serum, puncture fluid, swab sample, sputum, bronchoalveolar lavage fluid, etc

High Adaptability

Various sizes and forms (manual/automatic) for different scenarios

Efficient and easy operation

No pre-treatment of samples, 12 minutes to complete extraction

High-sensitivity

Sensitivity up to 50 copies/ml

| Product name | Package size | Sample type |
|---------------------------------------|----------------------------------|-------------------------|
| Mag Total Nucleic Acid Extraction Kit | 6x16 Tests/Kit, prepack reagents | Liquid sample, cells |
| Mag Total Nucleic Acid Extraction Kit | 96 Tests/Kit, prepack reagents | Liquid sample, cells |
| Mag Total Nucleic Acid Extraction Kit | 24 Tests/Kit, prepack reagents | Serum, plasma, urine |
| Mag Blood DNA Extraction Kit | 96 Tests/Kit, prepack reagents | Whole blood |
| Mag cfDNA Extraction Kit | 96 Tests/Kit, prepack reagents | Serum, plasma, urine |
| Mag Microbial DNA/RNA Extraction Kit | 96 Tests/Kit, prepack reagents | Bacteria, fungi |
| Mag FFPET DNA/RNA Extraction Kit | 96 Tests/Kit, prepack reagents | Tissues, cultured cells |

Nucleic Acid Extraction Kit

EXTRACTION EFFICIENCY TEST

Test method: Extraction operation by putting in a known concentration of nucleic acid.

Evaluation criteria: Calculate the yield of nucleic acid after extraction, and calculate the yield of nucleic acid.

Evaluation result: Compared with manufacturer T, the nucleic acid recovery efficiency of Wondfo Extraction Kit is higher, with recovery rate >90%.

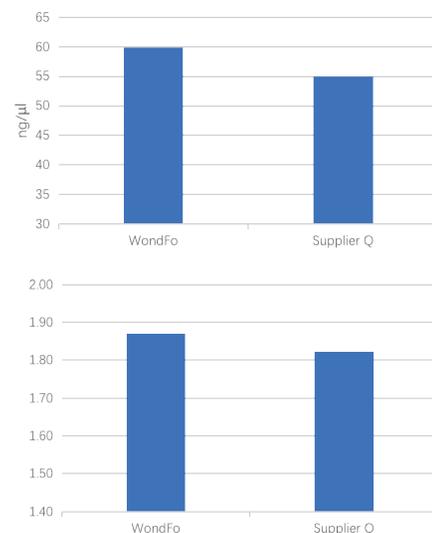
| | Input nucleic acid concentration (ng/μL) | Volume of nucleic acid input (μL) | Elution concentration (ng/μL) | Elution volume (μL) | Nucleic acid recovery rate |
|--------|--|-----------------------------------|-------------------------------|---------------------|----------------------------|
| Wondfo | 60 | 200 | 110.7 | 100 | 92.25% |
| | 60 | 200 | 113.1 | 100 | 94.25% |
| | 60 | 200 | 112.3 | 100 | 93.58% |
| | 60 | 200 | 112.7 | 100 | 93.92% |
| | 60 | 200 | 111.8 | 100 | 93.17% |
| T | 60 | 200 | 105.4 | 100 | 87.83% |
| | 60 | 200 | 107.8 | 100 | 89.83% |
| | 60 | 200 | 108.4 | 100 | 90.33% |
| | 60 | 200 | 110.7 | 100 | 92.25% |
| | 60 | 200 | 109.5 | 100 | 91.25% |

NUCLEIC ACID QUALITY TEST

The concentration of extracted nucleic acids is comparable or even better when cell cultures are extracted with the Wondfo Extraction Kit (magnetic bead type) and the manufacturer's Q Extraction Kit (centrifugal column type).

Wondfo extraction kit uses guanidine salt lysis method with magnetic nanobeads to effectively shorten the separation time.

| | NO. | Conc.(ng/μl) | A260/280 | A260/230 |
|--------|-----|--------------|----------|----------|
| Wondfo | 60 | 57.7 | 1.88 | 1.60 |
| | 60 | 61.2 | 1.85 | 1.61 |
| | 60 | 59.9 | 1.88 | 1.83 |
| | 60 | 60.8 | 1.87 | 1.85 |
| | 60 | 59.3 | 1.89 | 1.78 |
| Q | 60 | 54.3 | 1.81 | 1.65 |
| | 60 | 52.8 | 1.83 | 1.51 |
| | 60 | 57.5 | 1.84 | 1.57 |
| | 60 | 55.4 | 1.81 | 1.63 |
| | 60 | 54.9 | 1.80 | 1.71 |



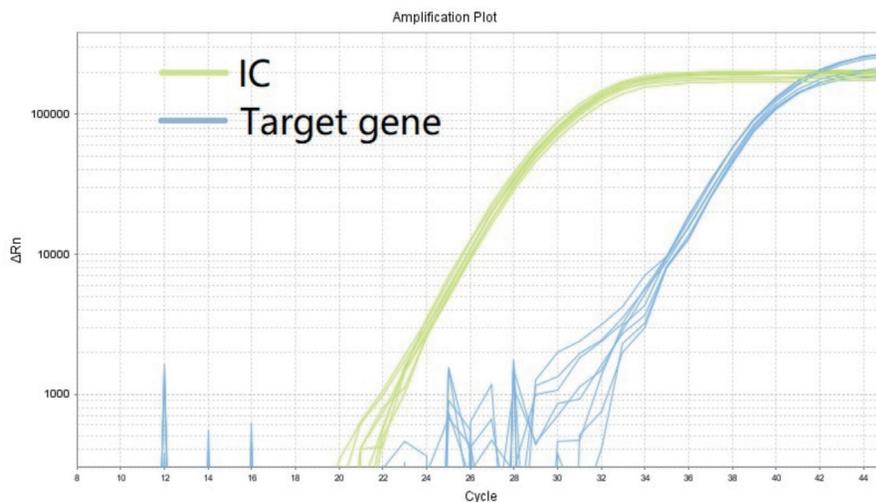
Compared with the centrifuge column extraction kit, Wondfo extraction kit can extract cell culture rapidly and obtain high purity and high yield nucleic acid.

Nucleic Acid Extraction Kit

COMPLEX SAMPLE TEST

Test method: Use the Wondfo extraction kit to extract and test complex samples. Low concentrations of pseudovirus were added to sputum samples, 200µL samples were injected for extraction, and the extracted nucleic acid was detected by PCR.

Evaluation result: The amplification curve was excellent with good repeatability.

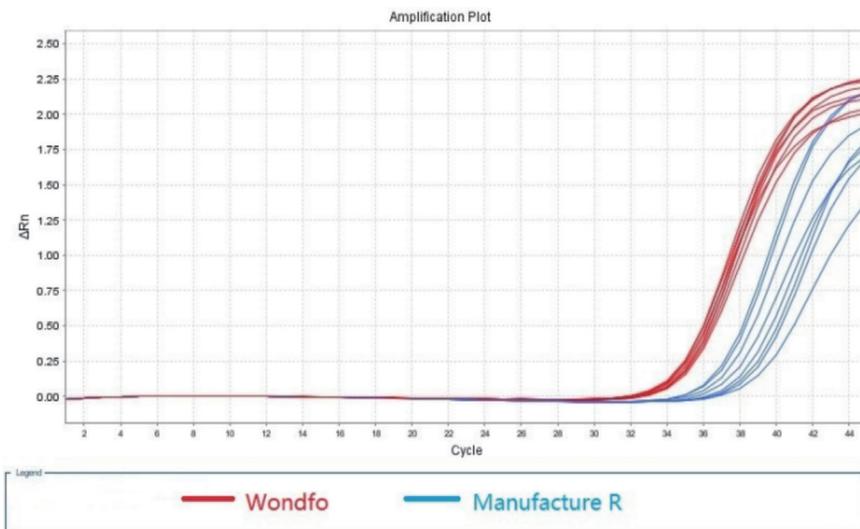


| NO. | IC | Target |
|-----|-------|--------|
| 1 | 28.18 | 36.65 |
| 2 | 27.91 | 36.85 |
| 3 | 28.14 | 36.91 |
| 4 | 28.12 | 36.86 |
| 5 | 28.02 | 36.41 |
| 6 | 28.51 | 36.38 |
| 7 | 28.36 | 36.69 |
| 8 | 28.31 | 36.48 |
| CV% | 0.64% | 0.54% |

COMPARISON TEST

Test method: The HBV reference was extracted and tested using Wondfo extraction kit (WE03P0009) and the manufacturer's R extraction reagent, (HBV reference concentration was 200IU/ml).

Evaluation result: The repeatability of the Wondfo extraction kit is better than that of manufacturer R in the extraction of low-concentration samples, and the precision of the Wondfo extraction kit is excellent.



| | Wondfo ct value | R ct value |
|-----|--------------------|---------------|
| 1 | 32.16 | 34.70 |
| 2 | 32.38 | 35.76 |
| 3 | 32.45 | 36.07 |
| 4 | 32.60 | 37.92 |
| 5 | 32.35 | 37.35 |
| 6 | 32.44 | 37.14 |
| 7 | 32.49 | 36.20 |
| 8 | 32.75 | 35.97 |
| CV% | 0.50% | 2.64% |

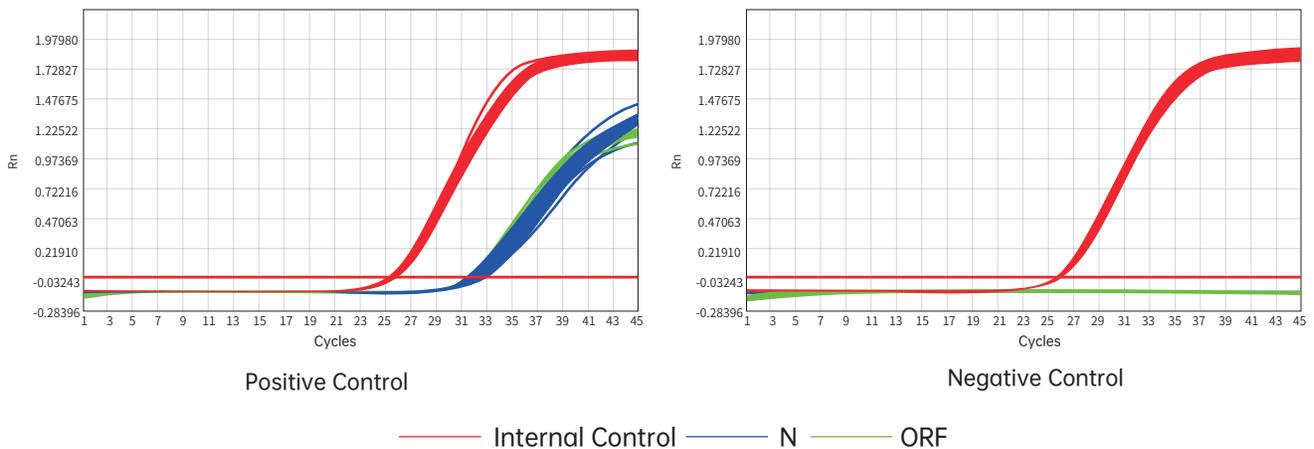
Nucleic Acid Extraction Kit

CROSS CONTAMINATION TEST

Test method: Using a mock sample containing a certain concentration of 2019-nCoV as a positive control and nuclease-free water as a negative control, based on NE-9600 to process automated extraction procedures.

Evaluation criteria: analyze RT-PCR result to confirm if negative samples are contaminated.

Evaluation result: 48 positive cases, 48 negative cases without contamination.

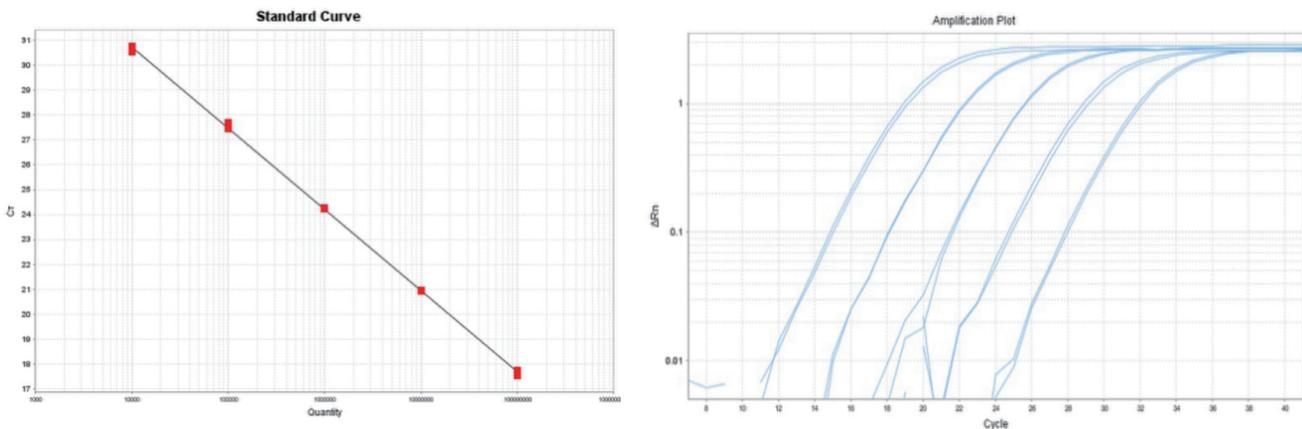


LINEAR REGRESSION TEST

HBV clinical samples or pseudovirus samples were diluted with negative plasma in a 10-fold concentration gradient, each sample was tested twice, and the test results were counted for regression analysis:

The linearity of Wondfo extraction was good, $R^2=0.999$.

The Wondfo extractant was detected by quantitative kit with good results.







TECHNICAL SPECIFICATIONS

| | |
|----------------------|--|
| Module | NE-2400/9600 |
| Method | Magnetic bead method |
| Throughput | 1-96 |
| Sample input volume | ≤ 500 μL |
| Temperature accuracy | ± 1°C |
| Interfaces | 1×COM Port 2×USB Port |
| Dimensions | 460×590×530 mm (L×W×H) |
| Weight | 43 kg |
| Power supply | AC 100 ~ 120 V / 200 ~ 240 V, 50 / 60 Hz |
| Run time | Approximately 12 to 30 minutes depending on protocol |
| Support sample types | Liquid biopsies, FFPE, Cells and tissue |

ORDERING INFORMATION

| Product | Contents |
|----------------------------------|--|
| Nucleic Acid Purification System | Robotic workstation with UV lamp, HEPA filter and Anti-drop baffle |
| Nucleic Acid Extraction Kit | Sample Plate, Prefilled Reagent Plates |



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