

Molecular Diagnostics



Products We Provide to SARS-CoV-2

»Sample Collection

- Viral Transport Media



»Nucleic Acid Extraction

- NES-32 Nucleic Acid Extraction System
- Viral DNA/RNA Isolation Kit

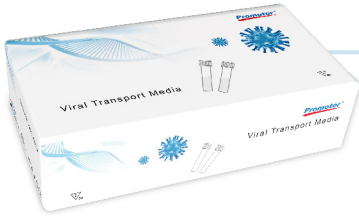
»PCR Detection

- Promotor® 960 Real-Time PCR System
- SARS-CoV-2 RT-PCR Test Kit



We have provided customized consulting service for 12 years.
More details, please contact:

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Viral Transport Media

Principle

The viral transport media of this product contains guanidine salt. After thoroughly mix with the collected specimen, the protein of the specimen is denatured and thus inactivated. The guanidine salt can also destroy the activity of nuclease that ensures the stability of the virus nucleic acid during preservation and transportation.

Product Feature



Safe and effective

- High concentration of guanidine salt for rapid inactivation of samples, providing protection to operators.



Long preservation time

- Samples in the VTM can be stored at 2-37°C for at least 7 days, and below -70°C for a longer period of time.



Multiple swab

- Suitable for a variety of swab types, including nasopharyngeal swab, oropharyngeal swab and nasal swab.



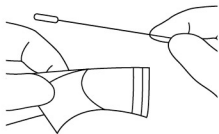
Easy to use

- After the sample is collected, break the swab and leave the swab head in VTM. If not extracted immediately, the sample can be stored or transported under appropriate conditions.

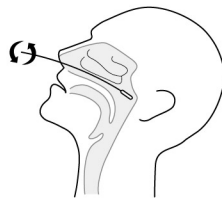
Acquisition Process

- To collect a nasopharyngeal swab sample:

1



2



3



4

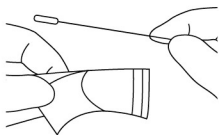


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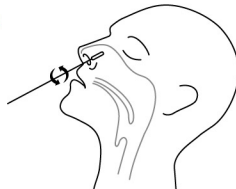


- To collect a nasal swab sample:

1



2



3



4

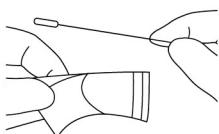


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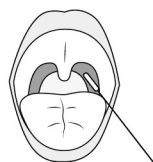


- To collect an oropharyngeal swab sample:

1



2



3



4



5





NES-32 Nucleic Acid Extraction System

Features & Benefits

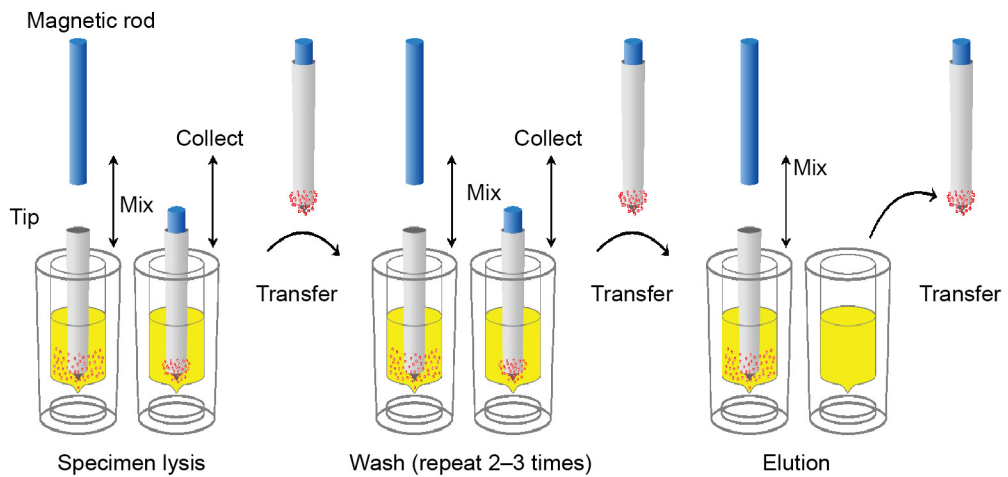
- Up to 32 samples/run
- High purity & high yield
- Ready-to-use reagents
- 8-inch large color touchscreen
- Heating base made of aviation material
- UV lamp and disposable consumables to prevent contamination



Extraction Reagent Kits



Principle



Specifications

| Parameters | Descriptions |
|---------------------------------------|--|
| Processing Volume | 20 to 1,000 μ L |
| Sample Capacity | Up to 32 samples per run |
| Well-to-Well CV | $\leq 1.5\%$ |
| Collection Rate of Magnetic Particles | $\geq 98\%$ |
| Heating Temperature | Lysis Temp (from RT to 120°C) Elution Temp (from RT to 120°C) |
| Sterilization | UV lamp |
| Dimensions | 437 x 512 x 470 mm (W x D x H) |
| Processing Time | 12 – 40 min |
| Instrument Port | USB/LAN |
| Power Source | 100 – 240 VAC, 50 Hz/60Hz, 600 VA |



RNA

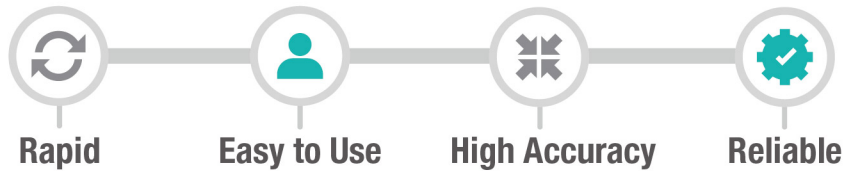


DNA/RNA

Viral Nucleic Acid Isolation Kits (Spin Column)

A simple, rapid protocol to generate high-quality templates for a broad range of downstream applications.

- Fast procedures and easy to use.
- Isolation and purification of high-quality viral DNA/RNA.
- Highly efficient recovery yield.
- Pure DNA/RNA ready for downstream applications.
- No phenol-chloroform extraction.



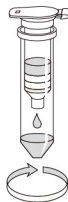
Highly pure Viral Nucleic Acid Isolation Kits workflow

1 Lysis



Specimen lysis

2 Bind



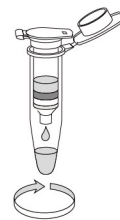
Load specimen

3 Wash



Wash and dry

4 Elute



Nucleic acid elution

Specifications

| Parameters | Descriptions |
|-------------------------|----------------------------|
| Format | Spin Column |
| Technology | Silica-membrane Technology |
| Sample Volume | 200 µL |
| Elution Volume | 50 µL |
| Sample Type | Serum, Plasma, Swabs |
| Yield | > 90% Recovery |
| Processing | Manual (Centrifugation) |
| Processing Time per Run | 15 – 30min |

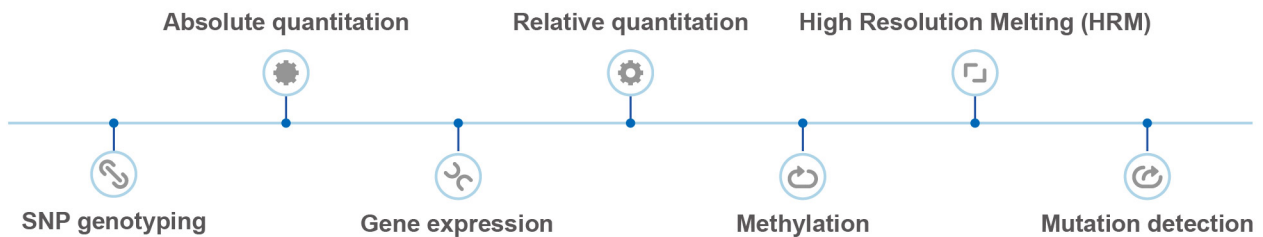


960 Real-Time PCR System

Features & Benefits

- Broad dynamic range: 1 – 10¹⁰ copies/mL
- Perform up to 4-target multiple analysis
- Long-life LED and sensitive PMT for high-performance results
- No need for ROX reference dye
- Special optical system design to avoid crosstalk from well to well
- Top signal detection technology to eliminate the influence of floccule or residual magnetic beads in the reaction
- Large color touchscreen and easy-to-use software

Applications



Specifications

| Parameters | Descriptions |
|------------------------------------|--|
| Thermal Cycling System | Peltier-based, 96-well block |
| Max Block Ramp Rate | > 5 °C /s |
| Max Block Cooling Rate | > 4 °C /s |
| Temperature Range | 4 – 100 °C |
| Temperature Accuracy | ± 0.1 °C |
| Temperature Uniformity (at 55 °C) | ± 0.1 °C |
| Number of Channels | 4 channels |
| Compatible Dyes | Channel 1: FAM, SYBR Green; Channel 2: VIC, HEX, JOE, TET ; Channel 3: ROX, Texas Red; Channel 4: CY5 |
| Additional Dyes Available | Additional dyes within the wavelength range compatible with the filters are supported |
| Multiplex Analysis | Up to 4 targets per well |
| Compatible Tubes | <ul style="list-style-type: none"> • Standard optical 0.2 mL 96-well plates (Semi-skirted, Non-skirted) • 8-strip 0.2 mL tubes • 0.2 mL optical tubes |
| Supported Volumes | 20 – 100 µL |
| Optical System | Long-life LED and PMT |
| Dynamic Range | 1 – 10 ¹⁰ |
| Sensitivity | Detection of 1 copy of template in a 50 µL reaction |
| Applications | Comparative Ct, Standard Curve, Relative Standard Curve, Allelic Discrimination |
| Dimensions (w x d x h) | 340 mm (13.4 in) x 557 mm (21.9 in) x 537 mm (21.2 in) |
| Weight | 32 kg (70.6 lb) |



Molecular Diagnostic Reagents

SARS-CoV-2 RT-PCR Test Kit

- CE marked, UK MHRA approved.
- Single-well, triple-target assay covering highly conserved regions within N, E and ORF1ab (RdRp) genes for high specificity.
- Full-process controls with negative, positive and internal controls.
- Qualitative detection of nucleic acids from SARS-CoV-2.
- Applied PCR machine: Applied Biosystems® 7500, Applied Biosystems® QuantStudio5, Promotor® 960 Real-Time PCR System, SLAN®-96P, CFX96 (Bio-Rad), LightCycler480 (Roche)

Key Features and Performance

| Parameters | Descriptions |
|--------------------------------------|---|
| Technology | Real-Time reverse transcription polymerase chain reaction (rRT-PCR) |
| Target Genes | N, E, ORF1ab (RdRp) |
| Specimen Types | Oropharyngeal swab, nasopharyngeal swab and deep cough sputum |
| Internal Control | RNase P |
| Minimum Sample Volume | 200 µL |
| Programmed Duration | <60 minutes (Test duration depends on applied PCR machine) |
| Limit of Detection | 500 copies/mL |
| Precision of In-batch and batch (CV) | < 5% |
| *Sensitivity | 99.71 % (95% CI: 98.41% – 99.99%) |
| *Specificity | 98.28 % (95% CI: 96.63% – 99.25%) |
| *Accuracy | 98.89 % (95% CI: 97.91% – 99.49%) |
| Storage Temperature | - 20 ± 5 °C |
| Package Size | 32 Tests/Kit |

*data from 811 specimens

We also offer other series molecular diagnostics products:

- HBV (Hepatitis B Virus) Quantitative PCR Test Kit
- HCV (Hepatitis C Virus) Quantitative PCR Test Kit
- TB (Mycobacterium Tuberculosis) PCR Test Kit (Real-time)
- HLA-B27 (Human Leukocyte Antigen B27) PCR Test Kit
- HPV 15 High-risk with 16/18 Genotyping PCR Test Kit
- HPV 18 High-risk Types with 16/18 Genotyping PCR Test Kit
- HPV (Human Papillomavirus) Genotyping PCR-RDB Test Kit



For more details, please see the Molecular Diagnostics Catalog.

Ordering Information

| Series | Catalog | Product | Kit size |
|-------------------------|--------------|--|-----------------|
| Sample Collection | P121-1341√ | Viral Transport Media | 50 Tests/Kit |
| Nucleic Acid Extraction | P111-1011√ * | NES-32 Nucleic Acid Extraction System | 1 Unit/Package |
| | P121-1301√ * | Nucleic Acid Extraction Kit (ready-to-use) | 32 Tests/Kit |
| | P121-1101√ * | Nucleic Acid (DNA) Extraction Kit | 32 Tests/Kit |
| | P121-1111√ * | Whole Blood Genomic DNA Extraction Kit | 32 Tests/Kit |
| | P121-1121√ * | Nucleic Acid (RNA) Extraction Kit | 32 Tests/Kit |
| | P121-1201√ * | Nucleic Acid (DNA) Extraction Kit (ready-to-use) | 32 Tests/Kit |
| | P121-1211√ * | Whole Blood Genomic DNA Extraction Kit (ready-to-use) | 32 Tests/Kit |
| | P121-1221√ * | Nucleic Acid (RNA) Extraction Kit (ready-to-use) | 32 Tests/Kit |
| Nucleic Acid Isolation | P121-1291√ * | Viral DNA/RNA Isolation Kit | 32/50 Tests/Kit |
| | P121-1051√ * | Viral Nucleic Acid Isolation Kit | 32 Tests/Kit |
| PCR | P111-2011√ * | 960 Real-Time PCR System | 1 Unit/Package |
| | P131-1511 | HBV (Hepatitis B Virus) Quantitative PCR Test Kit | 32 Tests/Kit |
| | P131-1521 | HCV (Hepatitis C Virus) Quantitative PCR Test Kit | 32 Tests/Kit |
| | P131-1121√ | PCR-Fluorescence Detection Kit for Human Papillomavirus Genotype 16/18 DNA | 32 Tests/Kit |
| | P131-1501√ | HPV 15 High-risk with 16/18 Genotyping PCR Test Kit | 32 Tests/Kit |
| | P131-1481√ | HPV (Human Papillomavirus) Genotyping PCR-RDB Test Kit | 24 Tests/Kit |
| | P131-1301√ | TB (Mycobacterium tuberculosis) PCR Test Kit | 32 Tests/Kit |
| | P131-1541 | HLA-B27 (Human Leukocyte Antigen B27) PCR Test Kit | 32 Tests/Kit |
| | P131-1591√ | SARS-CoV-2 RT-PCR Test Kit | 32 Tests/Kit |

√ CE marked *FDA Device Listing

Products Under Development

| Series | Product | Kit Size |
|--------------------------------|---|--------------|
| Hepatitis | Hepatitis B Virus and YMDD mutation Test kit | 32 Tests/Kit |
| | Hepatitis E Virus Test kit | 32 Tests/Kit |
| Sexually Transmitted Disease | CT (Chlamydia Trachomatis) Test Kit | 32 Tests/Kit |
| | UU (Ureaplasma Urealyticum) Test kit | 32 Tests/Kit |
| | NG (Neisseria Gonorrhoeae) Test kit | 32 Tests/Kit |
| | HSV II PCR Test kit | 32 Tests/Kit |
| Tumor | HPV 18 high-risk types with 16/18 Genotyping Test Kit | 32 Tests/Kit |
| | EB (Epstein-Barr virus) Test Kit | 32 Tests/Kit |
| Fertility | HCMV (Human cytomegalovirus) Test Kit | 32 Tests/Kit |
| Respiratory Infectious Disease | MP (Mycoplasma pneumoniae) Test Kit | 32 Tests/Kit |
| Gastrointestinal Disease | EV71 (human enterovirus 71) Test Kit | 32 Tests/Kit |
| | Coxsackie A virus RNA Test Kit | 32 Tests/Kit |

We also offer other diagnostic and medical products for:
Blood Glucose, Lateral Flow, Urinalysis Products, Hematology, POCT Products, Immunoassay and more.
Contact us for worldwide distribution and custom manufacturing (OEM) opportunities.

√ CE Marked for sale in the European Community 

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