

MGISP-960

Rafer

INNOVACIÓN
TECNOLÓGICA
PARA LABORATORIO

MG I
华大智造

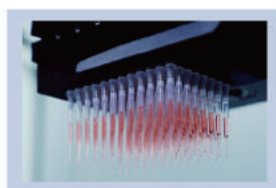
High-Throughput Automated Extraction And Liquid Handling Workstation



»»» 「 96 samples/60min , 192 samples/80min Automated nucleic acid extraction, guarding your safety 」

Product Introduction

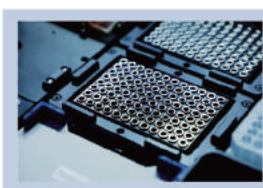
MGISP-960 is a high-throughput automated extraction and liquid handling workstation, which can be used with MGIEasy Magnetic Beads Virus DNA/RNA Extraction Kit to extract the virus nucleic acid of 96 samples within one hour, and can automatically prepare RT-PCR reaction mixture after extraction.



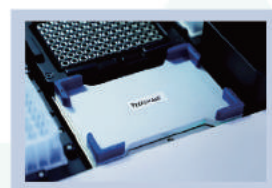
- ✓ 96-channel high precision pipette, processes 96 samples simultaneously



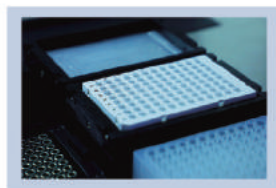
- ✓ Gripper for microplate transfers consumables easily



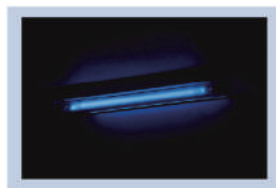
- ✓ Equipped with two high-efficiency 96-well magnetic racks, completes nucleic acid extraction and purification with magnetic beads



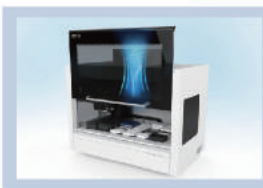
- ✓ Plate vortex, with a rotary speed of 100 rpm to 2000 rpm, brings high-efficiency extraction and purification



- ✓ Temperature control module, controls temperature within 4 °C-90 °C



- ✓ Equipped with three UV lamps for radiation in all directions. Ensure that each corner of the device can acquire the same radiation intensity



- ✓ Equipped with HEPA system of positive pressure, filter efficiency up to ISO Class5

Features

► Safety Design

Automated cleaning components (UV lamp and fan filter unit), filter tips, enclosed safety protection door, automated extraction, and nearly no contact to sample.

► High-efficiency

The general throughput of MGISP-960 is 96 samples/h. Easy to operate, no manual intervention during extraction. One person can operate three devices simultaneously.

► Accurate Results

The lower limit of the pipetting range is 2µL. The fine pipetting precision ensures better higher extraction efficiency.

► High Integration

Integrates various functions, requires less than 1m² floor space. Can prepare reaction mixtures from extraction to RT-PCR, accompanying with few common auxiliary devices.

Hardware specifications:

Pipette	Pipette type	96-channel pipette	
	Pipetting range	2 µL~200 µL	
	Pipetting precision	2µL :<5%	200µL:<1%
	Pipetting accuracy	2µL : <±10%	200µL:<±1%
Temperature control module	Temperature range	4-90°C	
	Temperature accuracy	±1°C at 55°C	
	Temperature uniformity	±1°C at 72°C	
Vortex	Rotary speed	100rpm - 2000rpm	
Positioning precision of robotic arm		±0.1mm	
HEPA system		ISO Class5	
Ultraviolet (UV) I		Radiation dose is higher than 100,000µW.s/cm ²	

MGISP-960

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Performance

Test method:

Use the simulated samples of saliva, throat swab containing novel coronavirus (RNA), dilute them in different concentrations. Compare the extraction efficiency of [MGEasy Magnetic Beads Virus DNA/RNA Extraction Kit + MGISP-960] and [competitor's Q Virus RNA Extraction Reagent Kit (silica membrane) + manual operation].

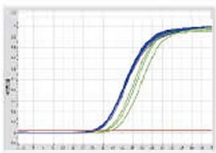
Evaluation method:

Use fluorescent PCR to quantify virus RNA.

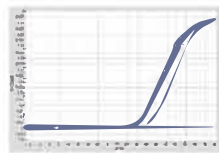
Test results:

Ct value of fluorescent quantitative PCR acquired by using MGI's automated extraction method is lower than others, indicating that the yield of virus RNA is higher than others. Meanwhile, for samples that use MGISP-960 to extract nucleic acid in the repeatability test, their curves are concentrated on the peak diagram, indicating finer repeatability.

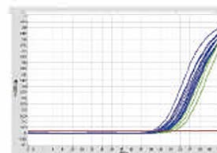
- Comparison of fluorescent PCR peak diagram of two nucleic acid extraction reagent kits:



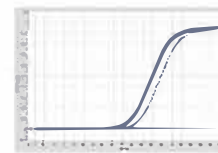
Simulated sample of saliva 1



Simulated sample of saliva 2



Simulated sample of saliva 3



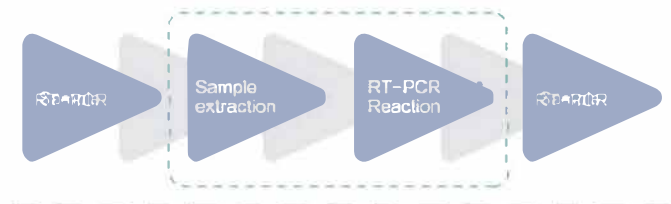
Simulated sample of throat swab

In the above diagrams, the blue curve refers to the fluorescent PCR test result of MGEasy Magnetic Beads Virus DNA/RNA Extraction Kit + MGISP-960, and the green curve refers to fluorescent PCR test result of competitor's Q Virus RNA Extraction Reagent Kit (adsorbing column method) + manual.

One-stop Solution: provide instrument, consumables and kits for extraction

Purchase order list:

Instrument		
Cat. No.	Product name	Specification
900-000154-00	High-throughput Automated Sample Preparation System MGISP-960RS, V9	EA, CE RUO
900-000165-00	High-throughput Automated Sample Preparation System MGISP-960, V9	EA, CE IVD
Consumables		
Cat. No.	Product name	Specification
1000000723	250µL automated filter tips	10 boxes/case
1000004644	1.3ml U-bottom deep-well plate	2 plates/package
1000012659	Hard-shell thin-wall 96-well skirted PCR plates, white shell/clear well	10 plates/package
Kit		
Cat. No.	Product name	Specification
1000020261	MGEasy Magnetic Beads Virus DNA/RNA Extraction	1728 preps, RUO
1000020471	MGEasy Magnetic Beads Virus DNA/RNA Extraction	96 preps, RUO



MGISP-960

High-throughput Automated Sample Preparation System



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