AUTOMATIC NUCLEIC ACID EXTRACTION SYSTEM BNPS-203

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Automatic Nucleic Acid Extraction System is a fully automatic high-throughput equipment with automatic sample addition, nucleic acid extraction and PCR system configuration. With magnetic bead extraction reagents, it is suitable for automatic nucleic acid extraction and purification of 1-96 clinical samples of various types. The flexible automatic liquid handling function can accurately complete sample loading and reagent distribution according to requirements. Humanized software design, simple operation, no manual steps, greatly improving work efficiency.

1. Accurate pipetting, air pressure correction can adapt to extreme environments such as flat ground, plateau, island, etc., to ensure the accuracy of pipetting
2. 96 samples can be processed within 60 minutes, realizing high-throughput processing of samples, saving time and effort
3. Reagent position and PCR plate position, can be refrigerated at 4℃
4. With high-efficiency filter, ultraviolet disinfection and sterilization, and safety door functions, effectively prevent microbial pollution
5. Multi-threaded control and three-module extraction can run three different extraction programs at the same time
6. Intelligent temperature control, over-temperature protection function
7. Preset multiple experimental programs, strong compatibility, suitable for various types of sample graphic guides, visualized operations

SPECIFICATIONS

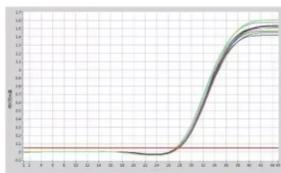| Model	BNPS-203
Extraction Method	Magnetic bead method
Working Mode	Automatic sampling + Nucleic acid extraction + PCR reaction system addition
Throughput	1~96, linear slide type sample rack
Extraction Volume	20~1000μl
Processing Time	Complete processing of 96 samples within 60 minutes (Related to reagents)
Magnetic Bead Recovery	≥98%
Temp Range	RT~105℃, lysis and elution position
Temp Accuracy	0.1℃
Heating Method	Dry bath heating
Heating Speed	RT~100℃ ≤6min
Shaking Function	Up and down oscillation (1~5 gears adjustable)
Extraction Position	6 (96-well deep well plate)
Robotic Arm	A robotic arm for adding samples and reagents
Pipetting Channel	2 channels
Liquid Detection	Pneumatic liquid level detection principle, intelligent detection of blocked needle
Pipetting Tip	50μl, 200μl,1000μl, disposable black conductive needle with filter element
Tip Amount	2~3 tips/sample
Pipetting Accuracy - 10μl tip	10μl, CV≤3.0%, Accuracy≤5.0%
Pipetting Accuracy - 50μl tip	50μl, CV≤2.0%, Accuracy≤2.0%
Pipetting Accuracy - 100μl tip	100μl, CV≤1.5%, Accuracy≤2.0%
Sample Volume	2~1000μl
Working Zone	2 PCR positions with cooling function; 6 tip positions; 2 reagent positions
Protective Function	Start up self-test, Power-off protection, High temp alarm, Over-temp protection, Tip removal protection
Disinfection Method	UV lamp(30W*1, 8W*1)
Illumination Lamp	10W LED lamp

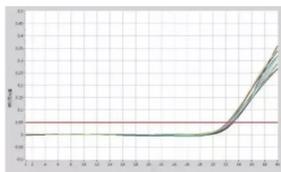|	
Audible Alarm	Yes (Red and blue blinking)
Safety Door Design	With safety lock function, program suspended if door opened
Display	10.1 inch touch screen, Windows system
Scanning	Optional
Interface	LAN interface (Bi-direction LIS optional)
Contamination Control	Built-in air duct and HEPA filter
IAP Function	Firmware can be upgraded online
Power Supply	110/220V, 50/60Hz
External Size(W*D*H)	1420*850*1842mm
Package Size(W*D*H)	Main Instrument: 1535*970*1180, Base: 1540*970*1160
Gross Weight	Main Instrument: 360kg, Base: 190kg
Alt Name	Automatic Nucleic Acid Extraction System

FEATURES

1. Accurate pipetting, air pressure correction can adapt to extreme environments such as flat ground, plateau, island, etc., to ensure the accuracy of pipetting
2. 96 samples can be processed within 60 minutes, realizing high-throughput processing of samples, saving time and effort
3. Reagent position and PCR plate position, can be refrigerated at 4℃
4. With high-efficiency filter, ultraviolet disinfection and sterilization, and safety door functions, effectively prevent microbial pollution
5. Multi-threaded control and three-module extraction can run three different extraction programs at the same time
6. Intelligent temperature control, over-temperature protection function
7. Preset multiple experimental programs, strong compatibility, suitable for various types of sample graphic guides, visualized operations
8. Nucleic acid products can be allocated to the 2*96 PCR reaction system to flexibly construct a variety of different PCR detection systems.
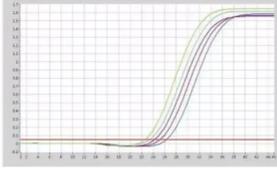
Product Performance:

Precision
The same HCV samples were repeatedly extracted for 10 times and analyzed by qPCR. CV<3%
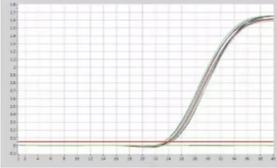

Sensitivity
The HCV samples with the concentration of 151U/mL were extracted, and the detection rate was 10/10

Linear

The HCV positive samples were diluted with equal dilution, and the linear correlation coefficient was $R^2 > 0.98$

Cross Contamination

HCV positive and negative samples were cross-extracted without cross-contamination.