Auto-Pure 4800

Nucleic Acid Purification System

Product Introduction

Auto-Pure 4800 is a high-throughput automatic nucleic acid extraction equipment, based on the magnetic bead method to extract nucleic acid. The steps of pipetting, lysis, washing, elution and PCR system construction can be automatically completed in the workstation, one-stop operation without manual intervention. The maximum reaction system is 1 mL. It can extract 48×1 mL sample system at the same time. Compared with manual extraction, it is more efficient and convenient. At the same time, the standardized and automated operation steps avoid human error, and the experimental results are more reliable and repeatable.

Automated Extraction + PCR Setup:

Reagent transfer → Sample transfer → Nucleic acid extraction → PCR setup

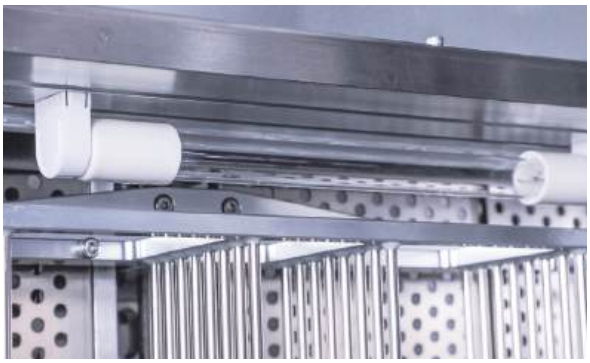
01

Fast & Flexible Experiment

1. Time for the extraction: 48 samples - 15 ~ 30 min (depending on different reagents)
   Time for the pipette sample: 48 samples - 13 min
2. Bottled or prefilled reagents can be selected for extraction according to actual needs

02

Effective Cross-Contamination Prevention



1. Negative pressure filter system to prevent aerosol contamination
2. Full coverage UV sterilization, exhaustive to clean the worktable

03

High-Precision Liquid Handling

1. 1+2 pipettors combination with pressure detection technology
2. Detailed pipetting parameter settings for different liquids can effectively improve the accuracy

04

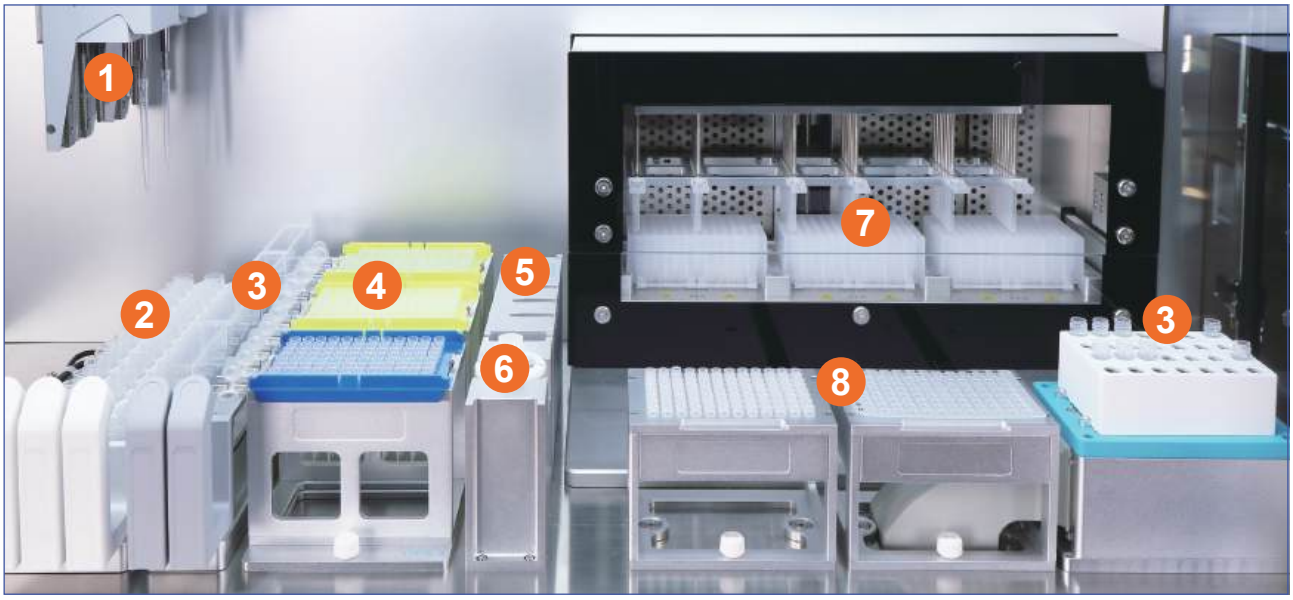
Vortex Magnetic Beads and PCR Reagent Block

1. Specially designed for magnetic beads, the vortex is stable which improves the efficiency of the experiment
2. The PCR reagent block can be customized according to customer needs

05

Graphical User Interface, Simple and Easy to Operate

Plate Layout



1 **Pipetting Arm** ---------- 3-channel pipetting arm, 2×1000 μL pipettors, 1×200 μL pipettor

2 **Samples Area** ---------- The 48 test tube rack can hold different consumables such as sample tubes, test tubes and centrifuge tubes. And it is equipped with a barcode scanner.

3 **Reagents Area** ---------- Two areas: nucleic acid extraction reagent and PCR reagents

4 **Tips Area** ---------- 2×1000 μL and 1×200 μL tip racks

5 **Waste Area** ---------- Used tips will be disposed into the waste container, which can intelligently calculate whether the tips are full and increase the storage space

6 **Vortex Magnetic-beads** ---------- Specially designed for magnetic beads, the vortexing is stable which improves the efficiency of the experiment

7 **Nucleic Acid Extraction Area** ------- Can extract 48 samples at the same time. Built-in heating incubator temp. range up to 120 °C, which can process the sample lysis and nucleic acid elution

8 **PCR Setup Area** ---------- 2 x 96 PCR plates or 24 x 8 strip PCR tubes

Specification

Model	Auto-Pure 4800
Function	Automatic pipette samples, extract nucleic acid and setup PCR systems
Information management	Support external USB scanner, barcode scanning function, automatic scanning function
Pipetting principle	Air displacement pipetting technology
Pipettor	Two 1000 μL pipettors and one 200 μL pipettor
Pipetting range (μL)	1 - 1000 μL
Tips	Allsheng tips, and other tips compatible with this instrument
Liquid detection	Pressure detection: liquid level detection, tip clogging detection and residual liquid detection
Samples per run	1 - 48
Process volume	50 - 1000 μL
Extraction uniformity	CV ≤5 %
Single sample consumables	Support
Heating temperature	Elution and lysis temperature control: RT. ~ 120 °C
Cooling block	0 °C ~ 105 °C (optional)
UV sterilization	Separate UV lamp: extraction area, pipetting area and waste container area
Fan filter	Equipped with three HEPA filters
Instrument port	USB port
Power supply	220 V, 8 A, 50 / 60 Hz
Power	Standby 30 W, maximum 550 W
Noise	≤ 60 dB
Net weight	130 kg

Pipetting Accuracy

Pipettor	200 μL	1000 μL
Pipetting range	1 - 200 μL	5 - 1000 μL
Accuracy (A)	1 μL: ±12 % 20 μL: ±3 % 100 μL: ±1 % 200 μL: ±1 %	5 μL: ±5 % 100 μL: ±2 % 500 μL: ±1 % 1000 μL: ±1 %
Precision (CV)	1 μL: ≤ 8 % 20 μL: ≤ 1.5 % 100 μL: ≤ 0.8 % 200 μL: ≤ 0.5 %	5 μL: ≤ 2.5 % 100 μL: ≤ 1.25 % 500 μL: ≤ 0.4 % 1000 μL: ≤ 0.4 %

Ordering Information

Code	Product Description
AS-17210-00	Auto-Pure 4800
RS-HSCF0101	Nucleic acid extraction or purification reagents (1 mL) Specification: 10 T, 24 T, 50 T, 100 T