

# AUTOMATED DNA & RNA EXTRACTION SYSTEM

## ALS-INS003



## **DETAILED INTRODUCTION:**

AUTOMATED DNA & RNA EXTRACTION SYSTEM (ALS-INS003) is an automatic instrument that can provide safe and efficient nucleic acid extraction and purification for biological laboratories and clinical medicine departments. It can extract from animal and plant tissues, viruses, fungi, bacteria, Nucleic acids are extracted from various samples such as plasmids, whole blood or cultured cells, and the instrument is equipped with multiple safety functions such as door opening protection, ultraviolet disinfection, and ultraviolet blocking of the observation window to ensure that the experimental results are safer and more reliable.

## **THE WORKING PRINCIPLE OF THE NUCLEIC ACID EXTRACTOR**

After the sample is lysed by the lysis solution, the nucleic acid free in the lysis/binding solution is specifically adsorbed by the magnetic beads. Through the cooperation of the magnetic rod and the magnetic rod cover, the magnetic attraction, transfer, release, and mixing are completed to make the adsorption. The nucleic acid magnetic beads/binding solution are separated, and various impurities that are non-specifically bound to the magnetic beads in the rinsing solution are removed, and finally the nucleic acid molecules are dissolved in the eluent.

## **PRODUCT FEATURES:**

High-precision screw rod is used to realize the transmission structure, with fast extraction efficiency and high nucleic acid yield;  
fast extraction 10-50 minutes/time (depending on the different reagents);  
adopting a stepper motor and brake scheme to ensure movement accuracy and Safe operation;  
simple and generous appearance, bright and spacious observation window, working conditions are clearly visible;  
UV lamp disinfection is used to reduce sample cross-infection and aerosol pollution;  
automatic power-off protection, prompts to continue unfinished program operation after power is restored, and ensure extraction/ The whole process of purification;  
using Android operating system, matching 10.1-inch capacitive touch screen, graphical menu-based navigation interface, easy and smooth operation;  
equipped with door opening protection function to prevent operator misoperation; support U disk storage/retrieval program and update software, and an external keyboard Mouse;

**PERFORMANCE INDEX**

Product name	Automated DNA & RNA Extraction System
Product number	ALS-INS003
Sample throughput	1-32
Processing volume	Automated DNA & RNA Extraction System
Use consumables	96-well deep well plate + magnetic rod cover
Magnetic bead recovery rate	≥98%
Difference between purification holes	CV≤3%
Operating temperature range	10°C-40°C
Operating humidity range	10%-90%
Heating temperature control range	Room temperature +5°C~125°C
Oscillating mixed mode	Multi-speed adjustable
Decontamination method	UV lamp
Lighting system	Have
Safety protection	Power failure protection
Reagent type	Magnetic bead reagent
Operation interface	10.1 inch full touch screen Android operating system
Interface method	Ethernet, USB, Wi-Fi
Product dimensions	430×390×505 (LxWxH)
Net weight	30KG
Power supply	AC100/240V 50Hz/60Hz 450W