ATHENESE-Dx
Early diagnosis for better life

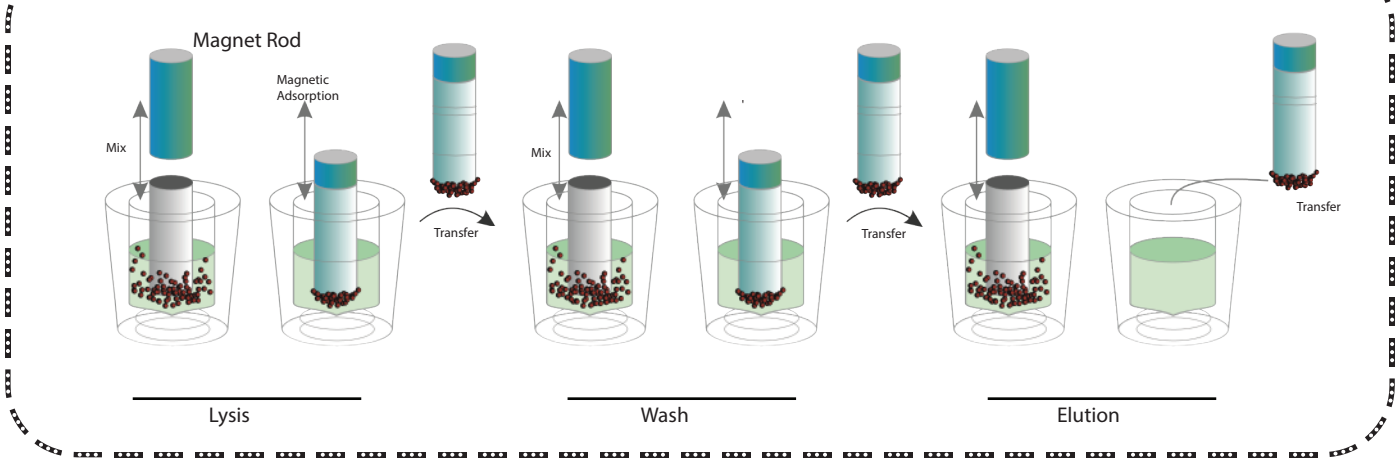
Easy, flexible, and reliable new generation technology for rapid extraction

ALTA®

Nucleic Acid Extractor

Alta Nucleic Acid Extractor utilizes the proven magnetic-particle technology to extract highly purified nucleic acid from a wide range of sample types relevant for molecular diagnostics, genetic identity testing, forensic testing, biomedical research, and gene expression analysis. The combination of easy-to-use instruments, with pre-loaded protocols selection and magnetic particle-based sample preparation kits filled with unique special reagent ensure the rapid nucleic acid extraction and highly purified products.

Magnetic Particle

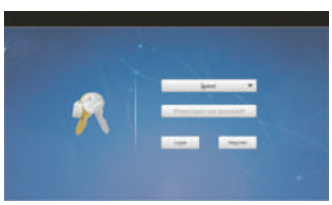


Unique remote control

Alta Nucleic Acid Extractor is an open system that can be easily operated through a 3.5" Touch screen combine with an unmatched remote control pad, no external computer is required. The pad connect the main unit via wifi, the "Extractor" app allow the operator to create, edit or delete the protocols. The protocols can also be easily shared between the main unit and pad, saving your stand-by time and improve your work efficiency.

Simply remarkable software

With the convenient software based on Android, a protocol can be set up and started with just a few clicks on the pad. Friendly and intutive interface make it simple even for first time user.



High throughput

Uses the proven Aridia Kits, Alta Nucleic Extractor offers high throughput of 32 sample per run.

▲ 32 samples per run

Performance

Genomic DNA was isloted from 10 human whole blood samples with the Alta Extractor and real-time PCR were run by Alta Real-time Quantitative PCR Detection System.

Figure1. Agarose gel electrophoresis

Sapmle	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
A260/A280	1.8	1.83	1.81	1.84	1.82	1.84	1.81	1.82	1.81	1.82
A260/A230	2.01	2.02	2.03	2.01	2.04	2.05	2.05	2.05	2.01	2.02
ng/μl	123.3	132.4	112.1	109.8	113.6	125.5	125.5	126.2	118.3	122.5

Figure2. Concentration and purity

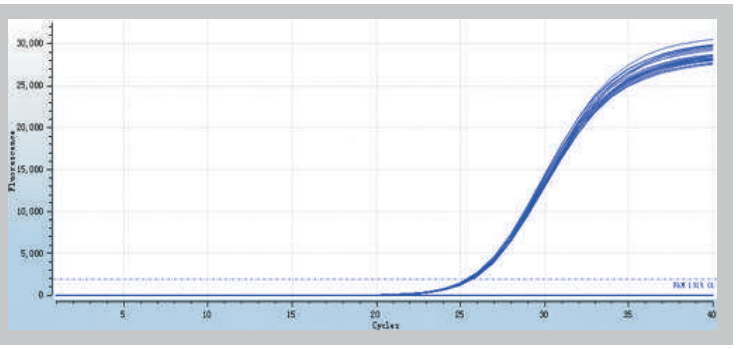


Figure3. Real-time PCR was done using 5 ng of extract the product (homo sapiens Beta-actin, ACTB DNA in each of the 96 block positions. Low variation Cq values (Cq range = 0.12and SD = 0.030) in each of the 96 positions demonstrated temperature homogeneity and equal treatment of all samples - independent of block position.

Seamless integration into PCR workflow

Alta Nucleic Acid Extractor can be seamlessly integrated into your workflow and is fully compatible with Aridia assay technologies. The elution tubes of purified nucleic acids can be transferred to the Alta Real-time Quantitative PCR Detection System instrument for PCR setup. Analysis by real-time PCR can then be carried out for your future applications.

Specifications

ITEMS	PARAMETER	
Processing Volume	30 -1500µ1, 30-1000µ1	
Capacity	32 samples per run customized	
Collection efficiency of the magnetic particles	≥95%	
Heating Temperature (Not suitable for 48 samples per run)	For cell lysis	Room temperature to 120°C
	For nucleic acid elution	Room temperature to 120°C
Processing-mode	Multi-mode, multi-speed available	
Reagents	Reagents suitable for Magnetic Particle Method	
Operation Interface	Touch-control Operation	
Storage Capacity	15 preinstalled protocols in main unit, unlimited in pad	
Protocol Management	Create, edit, delete, protocol mode	
Pollution control	UV light	
Computer Interface	USB	
Network Communication	Ethernet(optional)	
Dimensions	440mm (W) x 435mm (L) X 445mm (H)	
Weight	31.5kg	
Power Requirements	AC110±10%/230V-±10%, 50Hz/60H±1 Hz, 600W	
Ambient Temperatures	10-40°C	
Relative Humidity	<80%	

CTK BIOTECH
SIMPLIFYING DIAGNOSTICS
STRATEGIC PARTNER

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American Technology | For India

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