SPECIFICATIONS

ITEMS	PARAMETER	
Processing Volume	30 -1500μl, 30-1000ul	
Capacity	32 samples per run	
Collection efficiency of the magnetic particles	⩾95%	
Heating Temperature	For cell lysis	Room temperature to 120℃
	For nucleic acid elution	Room temperature to 120℃
Processing-mode	Multi-mode, multi-speed available	
Reagents	Reagents suitable for Magnetic Particle Method	
Operation Interface	English-Language Operating System, 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）×435mm（L）×445mm（H）	
Weight	31.5kg	
Power Requirements	AC110±10%/230V±10%, 50Hz/60H±1Hz, 600W	
Ambient Temperatures	10-40℃	
Relative Humidity	<80%	

LiNEAR is a trademark of LiNEAR CHEMICALS, S.L.U.

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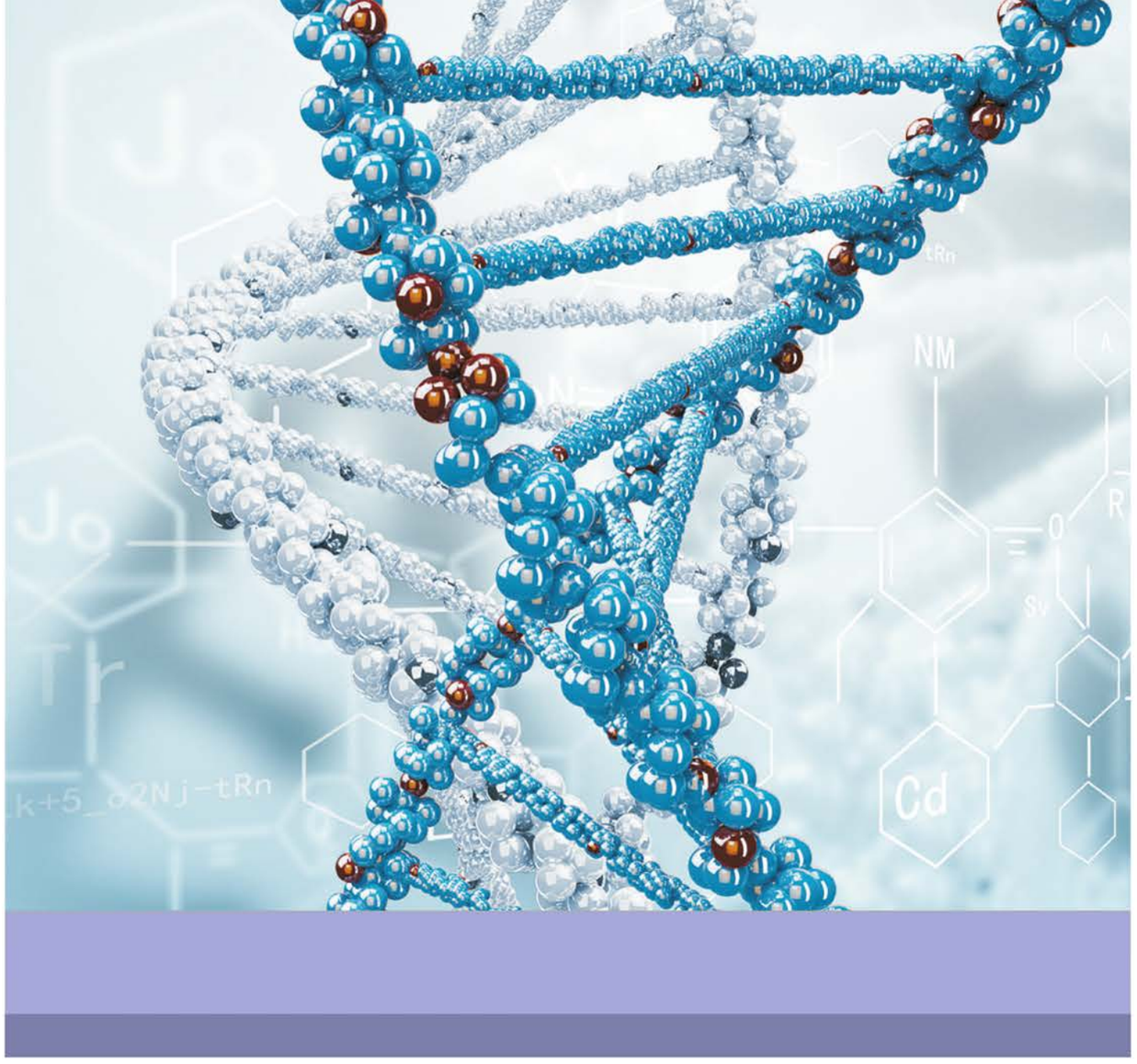
LiNEAR

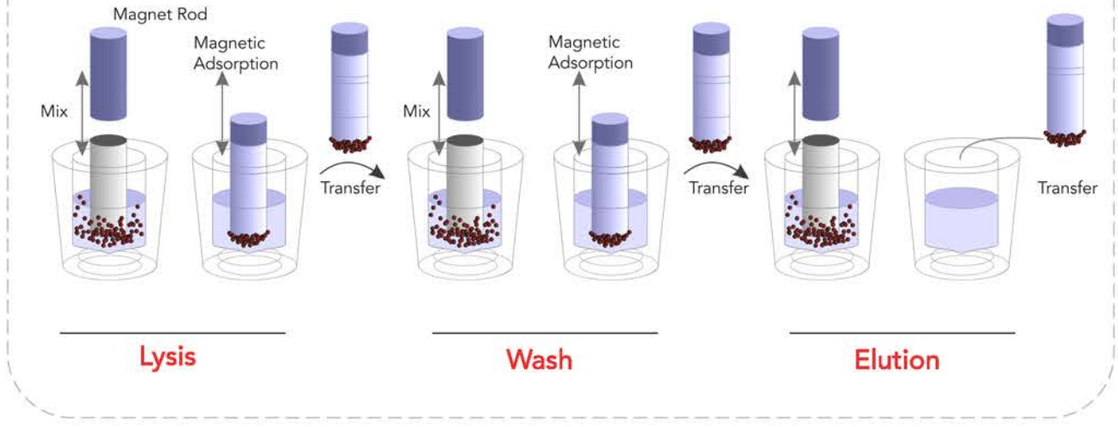
NEOS-32 XT

Nucleic Acid Extraction System



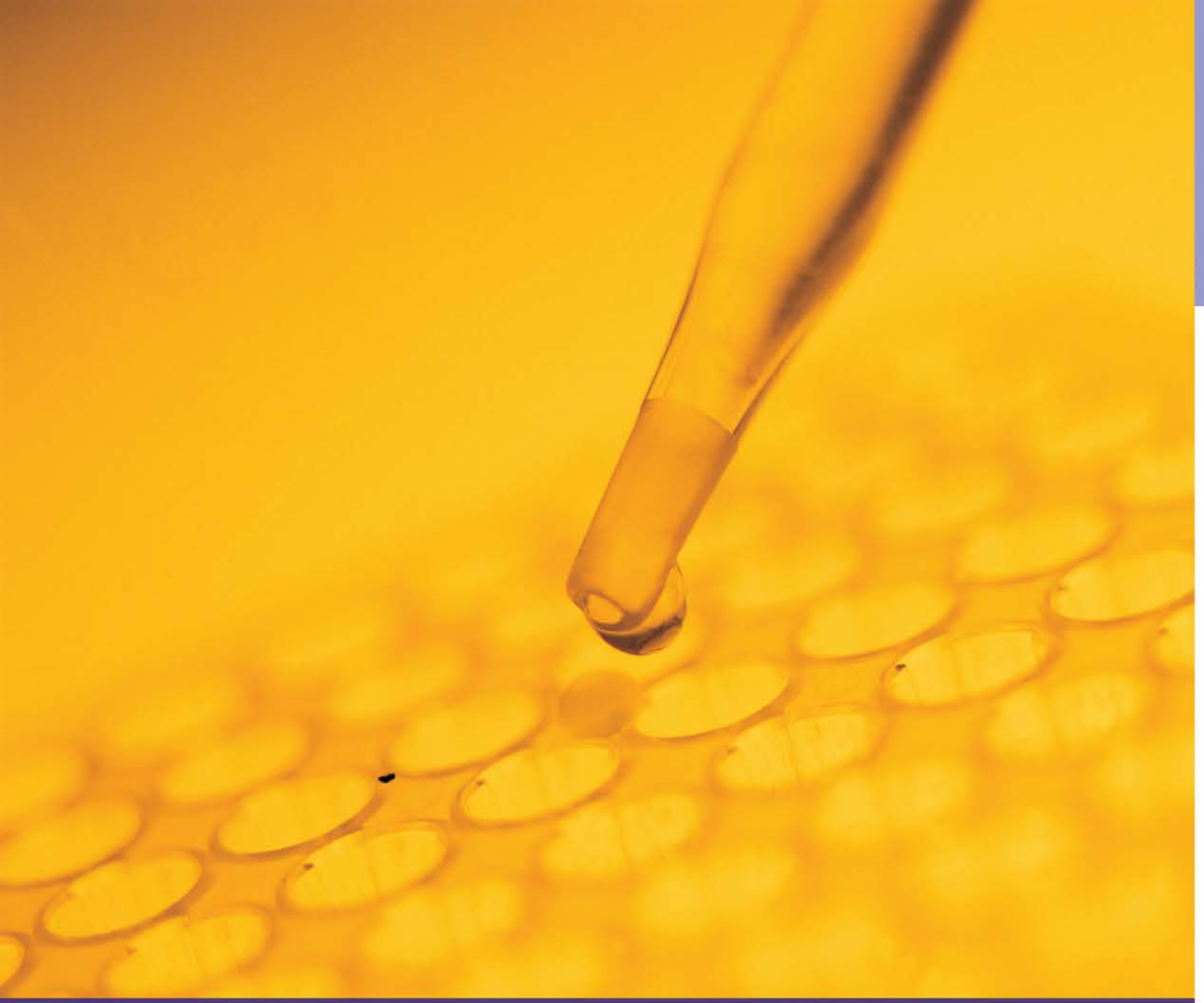
LiNEAR Nucleic Acid Extraction System utilizes the proven magnetic-particle technology to extract highly purified nucleic acid from a wide range of sample types relevant for molecular diagnostics, genetic identity testing, forensic testing, biomedical research, and gene expression analysis. The combination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

PRINCIPLE



NEOS-32 XT

Nucleic Acid Extraction System



NEOS-32 XT EXTRACTION SYSTEM AND PREPARATION KITS OFFERING YOU

- Easy Operation - Unique remote control pad saving time and improving your work efficiency
- Flexible solutions - Pre-loaded protocols selection for up to 32 samples per run
- Fast startup and immediate results - With special rapid reagents, the extraction can be done within 10 minutes
- Reliable result you can depend on - High-quality nucleic acids ready to use in sensitive downstream applications

EASY OPERATION

UNIQUE REMOTE CONTROL

NEOS-32 XT is an open system that can be easily operated through a 3.5" screen keyboard combine with an unmatched remote control pad, no external computer is required. The pad connect the main unit via wifi, the "Extractor"app allows 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.

A collapsible slot can be easily ejected for pad docking.

The hidden handle for easily moving.

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 intuitive interface make it simple even for first time user.

FLEXIBLE SOLUTIONS

EXCELLENT ACCURACY, HIGH PERFORMANCE

Uses the proven Gerbion extraction kits, LiNEAR Nucleic Acid Extraction System NEOS-32 XT offers an excellent accuracy, with a standard throughput of 32 samples per run.

▲ 32 samples per run

MULTI-PROTOCOLS ARE OPTIONAL

Pre-loaded optimizing protocols in the main unit are perfectly matched with Gerbion extraction kits that can cover most of the extraction requirements.

FAST STARTUP AND IMMEDIATE RESULTS

The proven magnetic particle-based sample preparation kits with special reagents ensure high-performance results of your extraction procedures. The unrivaled ease of use of the extraction Kits enables fast and reproducible extraction without the need for specialized training. The extensive application range delivers the flexibility that is essential for laboratories from a wide variety of sample types, like whole blood, tissue, FFEP etc.

With magnetic particle-based sample preparation kits, operators need only few steps to start the extraction instead of adding the sample and reagents one by one, save the work time and also reduce the operation errors.

Gerbion rapid extraction reagent kits including special reagents can reduce one wash step and accelerate the whole procedure in 10 minutes.

gerbion®

Temperature adjustable heat block can facilitate the process of lysis and elution to improve the efficiency, save your extraction time.

RELIABLE RESULT YOU CAN DEPEND ON

LiNEAR Nucleic Acid Extraction System is designed to ensure great process safety, high performance, and user convenience.

- A message will popup on the screen in case cabin door opened during experiments to reduce potential contamination.
- The precise mechanic control system helps to reduce intra-contamination.
- The disposable consumables: 96 deep well plate and mixing sleeve facilitate to reduce inter-contamination.
- An intelligent-design UV lamp decontaminates the inner surface of the system as needed.

PERFORMANCE

Genomic DNA was isolated from 10 human whole blood samples with the LiNEAR NEOS-32 XT and real-time PCR were run by LiNEAR Real-time Quantitative PCR Detection System .

Figure1. Agarose gel electrophoresis

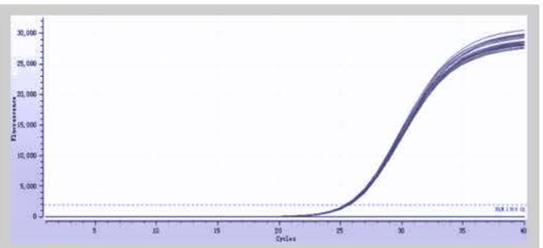


Figure3. Real-time PCR was done using 5 ng of extract the product (homo sapiens Beta-actin ,ACTB) DNA in each of the 96 block positions. Low variation Cq values (Cq range = 0.12and SD = 0.030) in each of the 96 positions demonstrated temperature homogeneity and equal treatment of all samples - independent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

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

SEAMLESS INTEGRATION INTO YOUR WORKFLOW

Nucleic Acid Extraction System NEOS-32 XT can be seamlessly integrated into your workflow and is fully compatible with LiNEAR assay technologies. The elution tubes of purified nucleic acids can be transferred to the LiNEAR Real-time Quantitative PCR Detection System instrument for PCR setup. Analysis by real-time PCR can then be carried out for your future applications.