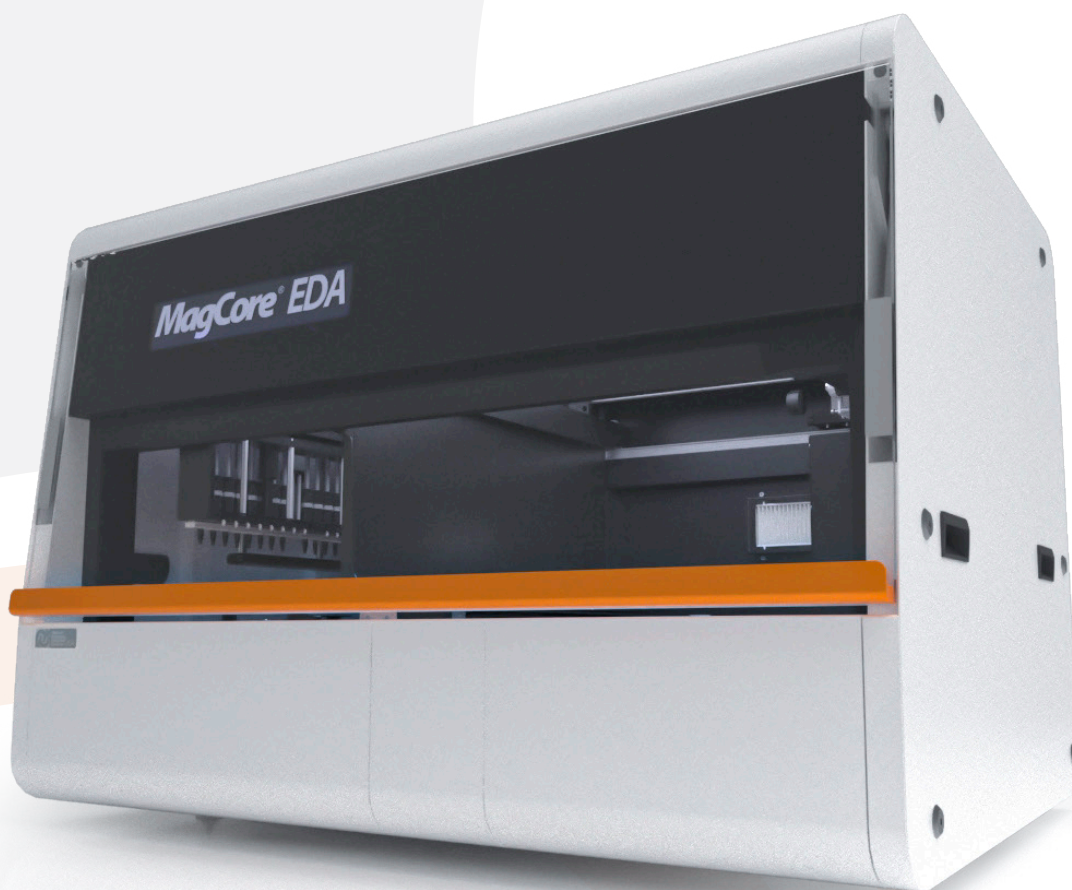


RBCBioscience

MagCore[®] EDA



*Automated Premium DNA/RNA Extraction &
Smart PCR Setup Solution*

AUTOMATED NUCLEIC ACID EXTRACTOR

16
Sample 1-16 Samples

24
Sample 1-24 Samples

48
Sample 1-48 Samples

 Spectrophotometer

 Touch Screen

 UV Decontamination

 Barcode Scanner

 Thermo Printer

 Built-in Programs

 USB Output

 Progress Monitoring

 LIMS

 HEPA Decontamination

 PCR set up

 PC Operation Interface



MagCore[®] Plus II

Process Monitoring
through your Smartphone



MagCore[®] Super

Spectrophotometer
Built-in



MagCore[®] EDA

NA Extraction & PCR Set-up



AUTOMATED NUCLEIC ACID KITS



NGS

PCR Product

**Genomic
DNA**

*Whole Blood, Buffy Coat, Plasma/Serum,
Cell-free body fluids, Free circulating DNA,
Amniotic Fluid, Cultured Cells, Animal
Tissue, Plant Tissue, Bacteria/Sputum,
Swab, FFPE, Stool, Forensic Specimens*

**Viral
Nucleic
Acids**

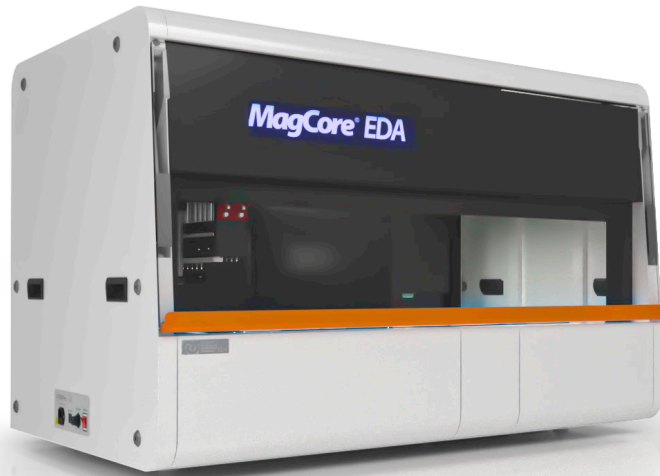
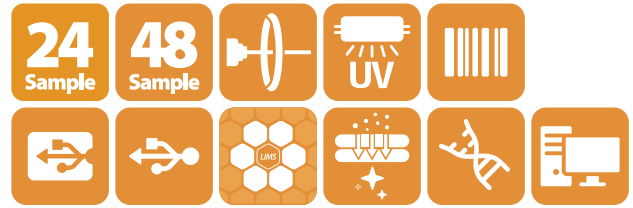
*Plasma/Serum,
Cell-free body fluids,
Urine, Swab*

**Total
RNA**

*Whole Blood, Plasma/Serum,
Cell-free body fluids,
Cultured Cells,
Animal Tissue,
Plant Tissue*

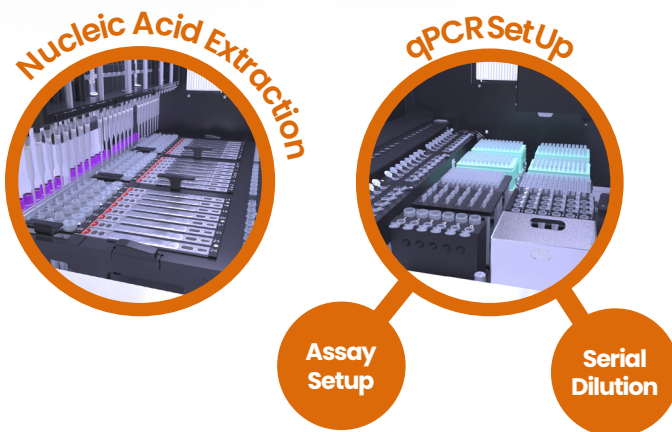
MagCore[®] EDA

Automatic Extraction and Smart PCR Setup



MagCore[®] EDA system is new generation instrument for nucleic acid extraction and PCR setup pre-treatment. MagCore[®] EDA can process up to 48 samples and a built-in spectrophotometer which makes it a complete solution to increase laboratory efficiency and simplify the workflow. Users can benefit from automatic purification, OD values retrieval, high NA concentration in final elute and compatibility with LIMS. Using MagCore extraction kits, MagCore[®] EDA offers consistent, reliable DNA or RNA extraction in 30–120 minutes, depending on the sample type.

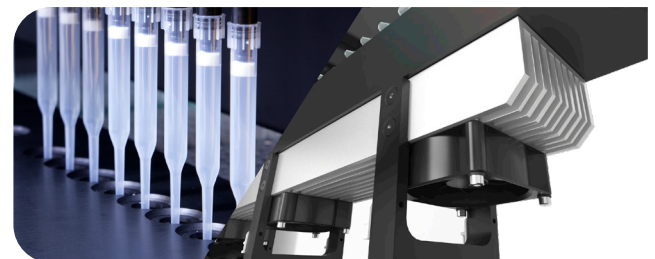
3 Modes Of Operation



PC USB Connection Interface



Built-in Thermoelectric Cooler



Extracted DNA/RNA
Can Be Temporarily Stored At 4~10°C

Worldwide Patented Magnetic Beads

Cellulose-coated magnetic beads, coupled with our patented binding and separation technology, guarantee high quality extracts.

UV Decontamination

The equipped UV lamp minimizes the risk of cross-contamination and ensures user and product safety.

HEPA Decontamination

HEPA system is installed in the PCR set up zone to eliminate contamination and ensure the purity of the samples.

Throughput up to 48 samples

From cartridge piercing to final elute, all steps are performed by the instrument, that allows running 1-48 samples. The instrument processed samples in batches of 24 at a time and has run setting for 24/48 sample to be processed at once, for time saving and flexible performance.

Ideal for both DNA/RNA extraction

Built-in protocols are created for extracting nucleic acids from a wide range of samples, including whole blood, plasma (circulating free nucleic acid), tissue, bacteria, virus, plant and forensic.

Automatic Optical Measurements of OD Values

Built-in spectrophotometer and our optical module provide users the option to automatically measure OD values and concentration of final eluates upon completion of the nucleic acid extraction process.

Automatic Barcode Scanning

Barcode reading of primary tube simplifies the tracking of the samples and ensures traceability.

Smart PCR setup

The system has 10 SBS positions, the option of keeping premixes cool, the option of using 0.1- and 0.2-ml standard tubes, along with customized tubes from other PCR suppliers.

Specification

Model	EDA
System Method	Cellulose coated magnetic beads
System Components	<ol style="list-style-type: none"> 1. Pipetting Unit: dispensing, transferring, 2 X-Y axis model 2. Electric Control: PLC model and Arm-based main board embedded in 3. UV Light: power 8W, life duration 11,000hrs 4. Contamination Prevention: HEPA filtration, Pipette tips with filter 5. Heating Block: RT-95°C 6. Nucleic Acid Concentration Detection Source: D2 lamp 7. Wavelength Detection: 230nm, 260nm, 280nm 8. Liquid detection sensor : PCR setup Zone 9. Automatic Barcode Scanning: Primary tube 10. Accessories: T-rack, Cartridge racks, trash drawer, 96-well PCR plate rack, 32-well 1.5ml tube rack 11. Thermoelectric Cooler 4~10°C 12. Stand (optional)
Power Supply	Voltage: AC 200-240V; Frequency: 50/60Hz
Dimension	W1240*D920*H830 (mm) / W48.81 x D36.22 x H32.67(inches)
Dimension (with stand)	W1240*D920*H1580 (mm) / W48.81 x D36.22 x H62.2(inches)
Net Weight	335 Kg / 739 lbs
Net Weight (with stand)	460 Kg / 1,014 lbs



Operating Parameters

Processing Capacity	1-48 samples (in batches of 24)
Processing Time	30-120minutes (depends on sample type)
Sample Volume	200/400/1200/4000 µl (application dependent)
Elution Volume	30/40/60/100/150/200 µl (application dependent)
Yield	200µl whole blood (average 6µg gDNA) 400µl whole blood (average 12µg gDNA)
Purity	DNA: O.D A260/A280 ratio 1.8±0.1 RNA: O.D A260/A280 ratio 2.0±0.2
Pipetting Accuracy	Extraction Zone: 40µl <5%; 60µl <2%; 100-900µl <1.5% PCR setup Zone: CV<1%, 5~50µl; CV<5%, 2~5µl; CV<10%, 1µl

Operating Environment

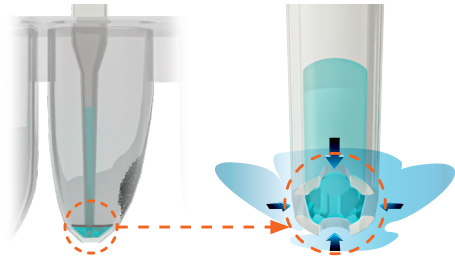
Temperatures allowed uring transportation, storage, and packaging	15°C-35°C
Temperatures allowed during operation	18°C -30°C
Pollution Degree	Level 2

Cartridge Design & Extraction Principle

MagCore® cartridges include all reagents needed for purifications, no additional handling is necessary. We minimize any possible contamination and spillage with an automated piercing step for our pre-sealed cartridges.

Tip Design

The unique cross-notch design at the end of the tips allows the instrument to pipette precise volumes and minimize liquid retention.

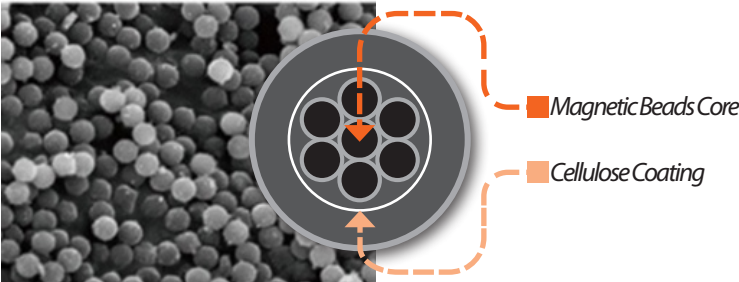


Extraction Principle



Worldwide Patented Magnetic Beads

Our design: multiple core inside, cellulose coating.

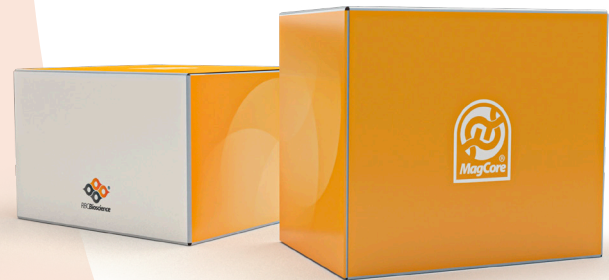
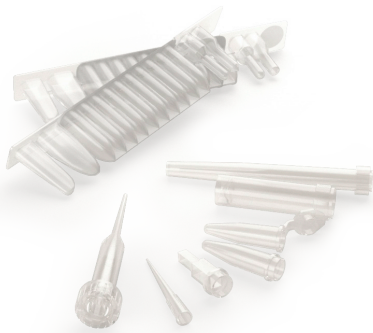


Particle range	~20µm (in water)
VSM	~40 emu/g
Cellulose w%	~50 %
Core size	~150 nm
Core VSM	~80 emu/g
Core material	Fe3O4
Bead Binding capacity	1 mg beads bind
	~300µg Calf thymus DNA
	~350µg human placenta DNA

Automated Nucleic Acid Kits

MagCore® Nucleic Acid Extraction Kits contain all reagents and consumables needed for 36, 72 or 96 nucleic acid isolation reactions. The consumables consist of reagent cartridges, individually packaged tip sets, sample tubes and elution tubes.

NGS	Genomic DNA	Viral Nucleic Acids	Total RNA
Clean Up & Size Selection	Whole Blood Free Circulating DNA Cultured Cell Plant Tissue FFPE Forensic Bacterial	Plasma/Serum Cell-free body fluids Urine Swab	Micro RNA FFPE Cells Whole blood Tissues



Genomic DNA

- 101**
Genomic DNA Whole Blood Kit (Speedy installation)
- 102**
Genomic DNA Whole Blood Kit
- 104**
Genomic DNA Large Volume Whole Blood Kit (1.2 ml)
- 105**
Plasma DNA Extraction Kit (1.2 ml)
- 115**
Circulating DNA large volume kit (3-4 ml)
- 106**
Genomic DNA Whole Blood Kit (For Genotyping)
- 110**
Cultured Cells DNA Kit
- 301**
Genomic DNA Plant Kit
- 401**
Genomic DNA Tissue Kit
- 405**
Genomic DNA FFPE One-Step Kit
- 406**
Forensic DNA Direct Kit
- 502**
Genomic DNA Bacterial Kit
- 504**
Gut Microbiome DNA Kit

NGS

- 701**
NGS Auto Size-Select purification Kit

Viral Nucleic Acids

- 202**
Viral Nucleic Acid Extraction Kit (Low PCR Inhibition)
- 203**
Viral nucleic acid extraction kit (high sensitivity)
- 220**
Viral Nucleic Acid Large Volume Extraction Kit (2.4 ml) High Sensitivity
- 211**
Viral Nucleic Acid Large Volume Extraction Kit (1.2 ml)

Total RNA

- 605**
Total RNA FFPR One-step Kit
- 620**
miRNA Extraction Kit
- 631**
triXact RNA Kit



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**MagCore[®]
Automated
Nucleic Acid
Extractor**

**MagCore[®]
Nucleic Acid
Extraction
Kits**



MD 757696

FDA (10055336) registered and CE-IVD certified (Instruments & Reagents) Manufactured in accordance with quality system requirements that comply with ISO 13485 standards and QSR

Ver. 1.0.1