AccuBioMed®

iColumn LV Automated DNA/RNA Purification System

Specialized for Liquid Biopsy

Super Trinity Technology

For Large Volume liquid biopsy purification

Super Trinity Technology

Fast ⦿

Ease of Use ⦿

Simple and Stable ⦿ Workflow

Highly Increase Sensitivity ⦿ of Detection

Super Trinity Technology is a novel solution for automated extraction of nucleic acid from large volume samples.

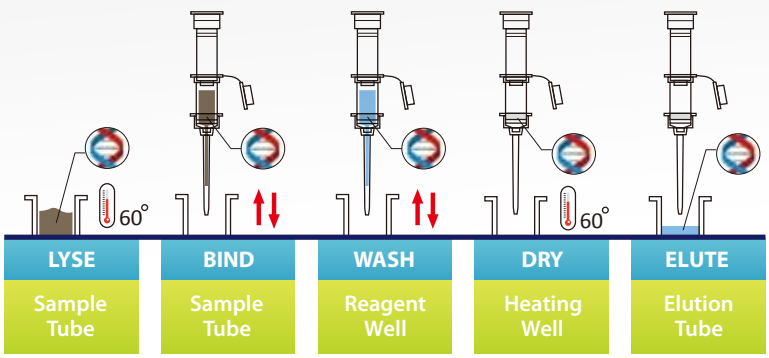
The iColumn LV DNA/RNA extraction system with Super Trinity Technology can extract nucleic acids from up to 5 mL sample volume. With this ability to process larger sample volumes, comes the benefit of increased sensitivity of isolating circulating nucleic acids from liquid biopsies.

iCartridge ™

All necessary reagents and trinity components are prefilled in the iCartridge. During the purification process the Super Trinity assembly "moves" along each reagent well of the iCartridge in a sequential manner. When the Super Trinity reaches each reagent well, nucleic acids are washed and eluted while waste is discarded safely back into the empty wells of the iCartridge.

Workflow

iColumn is a fully walk-away system. From the Lyse, Bind, Wash, Dry to Elute steps the robotic arm of the iColumn can connect components of the Trinity and move along with the iCartridge to complete the whole purification procedure.



Large Sample Volume & Small Elution Volume

Unblocking Bottlenecks of Circulating DNA/RNA Detections

Feature

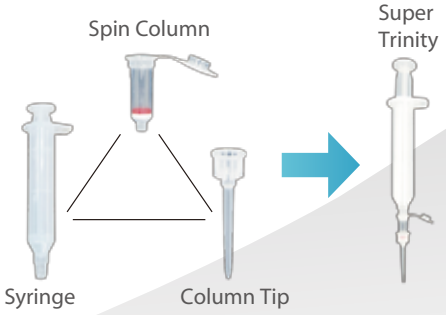
Super Trinity Technology
Step 1 – Load 1 to 5 ml Liquid Biopsy
Step 2 - Work on iColumn LV for 60-90 min
Step 3 - Elute in 50 µl

Following Applications

- Cancer Diagnosis
- Monitoring the Response to Cancer Therapy
- Non-Invasive Prenatal Testing (NIPT)
- Biomarker Discovery

Super Trinity

Super Trinity Technology is a combination of Spin Column, Syringe and Column Tip. Utilizing the difference of air pressure, the lysate, buffers, and elution can be easily passed through the silica membrane with reversed ways and finally release the high quality eluted samples for further experimental needs.



Ease Of Use

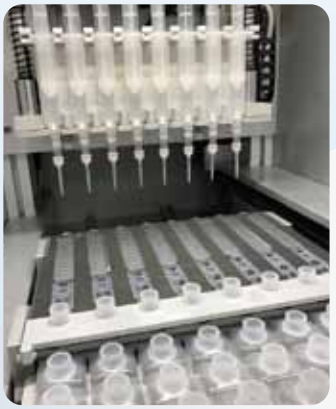
Integrated computer with 7" TFT LCD touch panel and intuitive software design. Navigate you to go through purification procedure smoothly.

Choose product type

Select protocol, confirm and go!

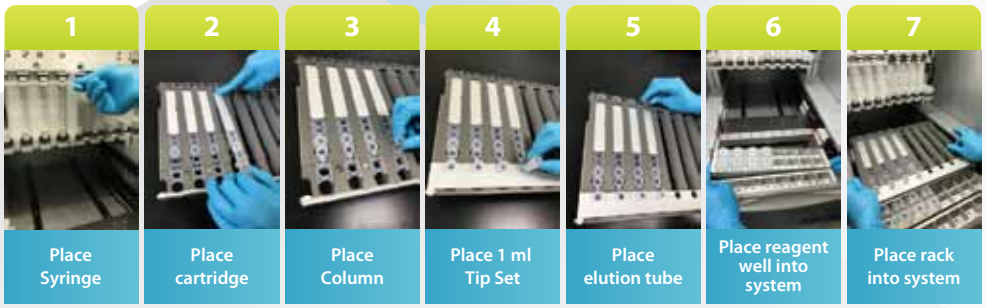
Streamline workflow

Combined the Super Trinity and iCartridge Technology. iColumn LV is able to purify 1-8 or 1-16 samples simultaneously. All samples are placed in independent line to avoid any crossing over.



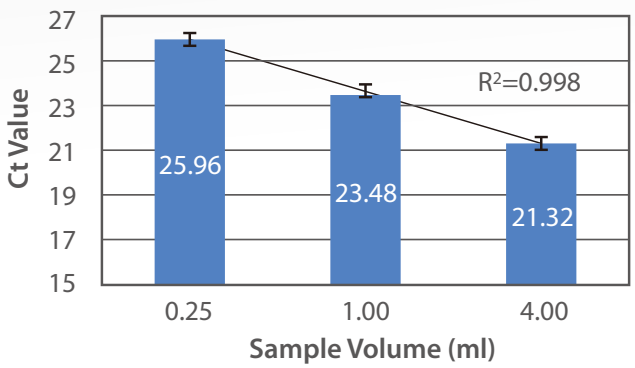
Ready To Go

With the prefilled reagent cartridge, and convenient setup rack. Experimental setup is easy and requires a minimum handling time.

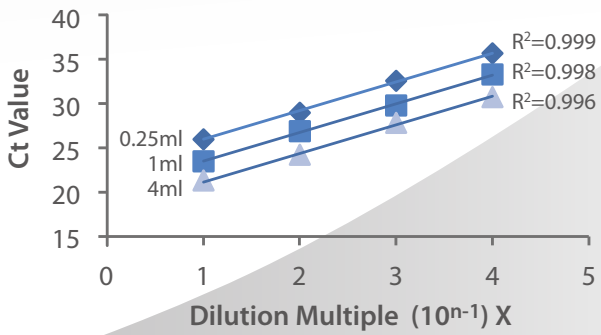


PERFORMANCE

Purification of circulating DNA from different plasma volumes.
Circulating DNA was purified from 0.25ml, 1ml and 4ml plasma sample by iColumn LV Automated DNA/RNA Purification system with AccuPure Circulating DNA Mini Kit. The relative amount of the GAPDH gene increases linearly with increasing the sample input volume.



Analysis of inhibitory residues by qPCR
Each eluate from 0.25ml, 1ml, and 4ml sample are serial diluted and performed qPCR to amplify GAPDH gene. High linearity results show that almost no inhibitors inside of eluate of these samples.



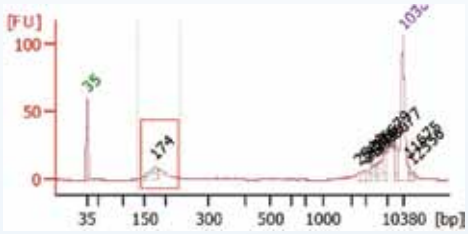
DATA REPORT

3mL plasma → iColumn LV cfDNA Purification → Capillary Electrophoresis

High integrity performance

iColumn LV Automated DNA/RNA Purification System with AccuPure Circulating DNA Mini kit can purify high integrity circulating DNA from plasma sample successfully.

1.



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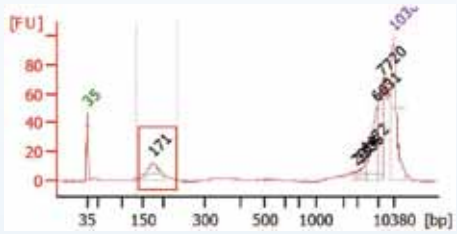

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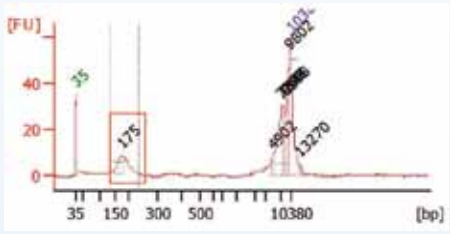
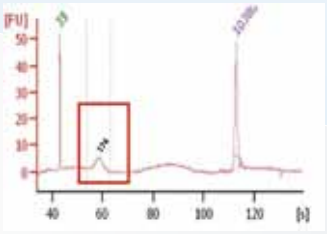


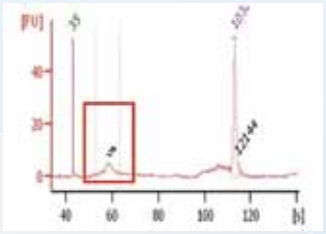
Comparison with Q-brand manual extraction kit

iColumn LV Automated DNA/RNA Purification System with AccuPure Circulating DNA Mini kit (Fig LV-1 & LV-2) can purify high purity and high quantity circulating DNA as same as Q brand manual kit (Fig Q1 & Q2).

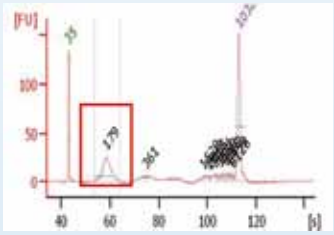
LV-1



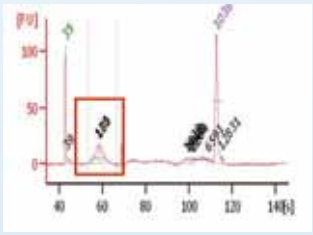
LV-2



Q1



Q2



SPECIFICATION

iColumn LV 8/16 Automated DNA/RNA Purification System	
Dimension	W440 x D720 x H640 mm (8), W740 x D720 x H640 mm (16)
Net weight	60kg (8), 85kg (16)
Throughput	1-8, 1-16
Power supply	220V, 50/60 Hz
Light Source	LED white light x 1, UV light
Heat Block	RT~100°C x 1, RT~70°C x 1
Interface	WVGA(16:9) 7"TFT LCD, Touch Screen
Processing time	60 - 90 min (depend on sample type and method)
Sample volume	1 - 5 ml
Elution volume	50 µl
Operation condition	15-30°C

ORDERING INFORMATION

Product	Cat. No.
AccuPure Circulating DNA Mini Kit-LV3(96)	D11096-LV3
AccuPure Circulating DNA Mini Kit-LV5(96)	D11096-LV5
iColumn LV 8 Automated DNA/RNA Purification System	ABM2008
iColumn LV 16 Automated DNA/RNA Purification System	ABM2016

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