



**AccuBioMed<sup>®</sup>**

## iColumn LV Purification System

Unblocking Bottlenecks of Circulating DNA/RNA Detections



# Super Column Technology

For Large Volume liquid biopsy purification

Fast



## Super Column Technology

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

iColumn LV DNA/RNA extraction system with Super Column Technology can extract nucleic acid up to 5 mL sample volume. With the amplification of sample volume, it can highly increase the sensitivity of detection of liquid biopsy.

Ease of Use

Simple and Stable  
Workflow

Highly Increase  
Sensitivity of  
Detection

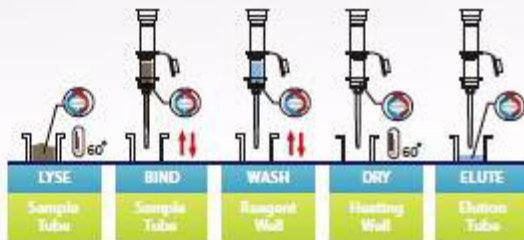


iCartridge™

All necessary reagents and trinity components are prefilled in the iCartridge. During the purification process, Trinity column set "moves" along each reagent well of iCartridge in an orderly manner. When it reaches each well, nucleic acid is washed and waste is discarded back into the iCartridge.

## Workflow

iColumn is a fully walk-away system from Lyse, Bind, Wash, Dry to Elute steps. Robotic arm can connect Trinity by itself and move along with the iCartridge to complete whole purification procedure.



# Large Sample Volume & Small Elution Volume

## Unblocking Bottlenecks of Circulating DNA/RNA Detections

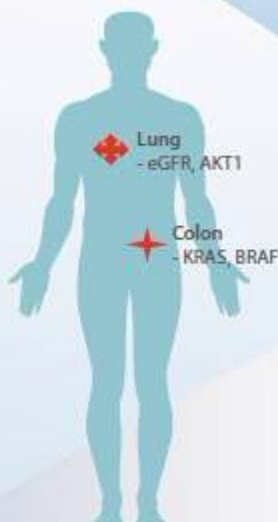


### Super Column Technology

- Step 1 - Load 1 to 5 ml Liquid Biopsy
- Step 2 - Work on iColumn LV for 30 min
- Step 3 - Elute in 50  $\mu$ l

### Following Applications

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



### 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!

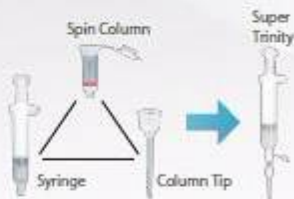
### Streamline workflow

Combined the 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.



### Super Trinity

Super 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.



### Ready To Go

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



Place cartridge



Place 1 ml Tip Set



Place elution tube



Place reagent well into system



Place rack into system

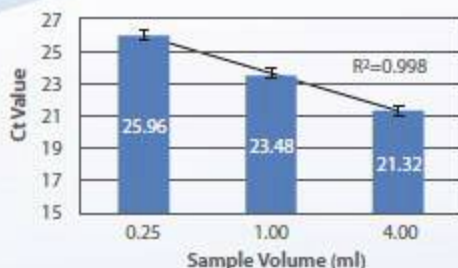


## PERFORMANCE

### Purification of circulating DNA from different plasma volumes.

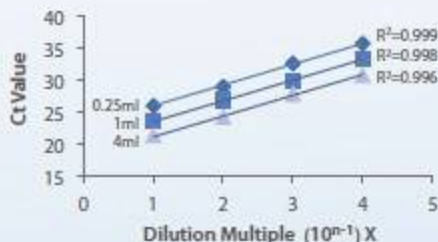
Circulating DNA was purified from 0.25ml, 1ml and 4ml plasma sample by iColumn LV system with AccuPure LV Circulating DNA Kit.

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.



## SPECIFICATION

iColumn LV 8/16 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	30 - 50 min (depend on sample type and method)
Sample volume	1 - 5 ml
Elution volume	50, 100, 150, 200 $\mu$ l
Operation condition	15-30°C

## ORDERING INFORMATION

Product	Cat. No.
AccuPure LV Circulating DNA Mini Kit (96 rxn)	D11096_LV
AccuPure LV miRNA Mini Kit (96 rxn)	R12096_LV
iColumn LV 8 Purification System	ABM2008
iColumn LV 16 Purification System	ABM2016