AccuPure Circulating DNA Mini Kit

CE IVD

For automated extraction on iColumn 12/24 System

Purify cfDNA from serum, plasma or body fluid

This kit is designed to purify circulating tumor DNA and circulating fetal DNA from cell free samples. In order to catch more cfDNA, it's quite normal to enlarge the sample volume. But once sample volume increased, inhibitors also accumulated. So, the challenge of cfDNA purification is how to remove increased inhibitors come from larger sample volume effectively and lose the very rare cfDNA as few as possible.

By iColumn[™], we utilize Trinity Technology[™] to catch cfDNA by column instead of magnetic beads which not only get higher yield but also with higher purity.

FEATURES

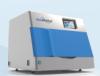
- Fully automated on iColumn 12/24 System
- Column based method
- No organic solvents required
- Concentration of cfDNA, high input and low elution volumes
- Removal of contaminants and inhibitors



WORKFLOW _

800 µl Serum Plasma Lysis

Add Lysis Buffer Add Carrier RNA Add PK



iColumn 12/24

SPECIFICATION

| AccuPure Circulating DNA Mini Kit (D11096) | | | |
|--|--|--|--|
| Sample type | Serum, Plasma or Cell free body fluids | | |
| Sample volume | 800 μl | | |
| Elution volume | 50 μl | | |
| DNA Recovery | Able to catch cfDNA \geq 50 bp, typically DNA recovery ranges from 1-100 ng/ml of plasma or serum. (The yield varies depending on the sample source and the health situation of the donor.) | | |
| Method | Column based | | |
| System | For iColumn 12/24 System | | |
| Applications | 1.Cancer Diagnosis 2.Monitoring the Response to Cancer Therapy 3.Non-Invasive Prenatal Testing (NIPT) 4.Biomarker Discovery | | |

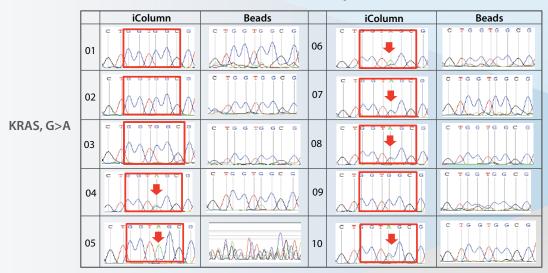


| | Purification | cfDNA | QPCR (GAPDH) | |
|-----|--------------------|-------|--------------|------|
| No. | System Yield. (ng) | Ct | Melt | |
| 1 | iColumn | 26.5 | 26.78 | 85.8 |
| | Beads | N/A* | 34.48 | 84.7 |
| 2 | iColumn | 25.6 | 27.08 | 86.2 |
| | Beads | N/A* | 34.60 | 84.5 |
| 3 | iColumn | 26.6 | 27.98 | 86.2 |
| | Beads | N/A* | 35.44 | 84.5 |
| 4 | iColumn | 32.0 | 26.21 | 86.2 |
| 4 | Beads | N/A* | 35.65 | 84.5 |
| 5 | iColumn | 20.3 | 28.73 | 86.0 |
| | Beads | N/A* | 34.67 | 84.5 |
| 6 | iColumn | 22.0 | 26.86 | 86.2 |
| | Beads | N/A* | 34.81 | 84.5 |
| 7 | iColumn | 16.9 | 30.32 | 86.5 |
| L ' | Beads | N/A* | 35.15 | 84.5 |
| 8 | iColumn | 45.9 | 25.12 | 86.0 |
| | Beads | N/A* | 33.65 | 84.5 |
| 9 | iColumn | 26.5 | 26.82 | 86.0 |
| | Beads | N/A* | 33.49 | 84.5 |
| 10 | iColumn | 32.9 | 24.93 | 86.0 |
| | Beads | N/A* | 33.70 | 84.5 |
| PC | | | 30.50 | 86.0 |
| NTC | | | N/A | N/A |

Superior yields than other beads systems

*Purified cfDNA was quantified by Qubit system. Concentration lower than 0.5ng/ml is not detectable and showed as N/A.

After one time of low speed centrifuge and another time of high speed centrifuge, 800 µl of plasma sample was collected and applied to iColumn system and Beads system in parallel to purify cfDNA.



Removal of contaminants and inhibitors for PCR or qPCR

Eluate from both iColumn and Beads system are enriched by PCR enrichment kit to detect KRAS mutation. PCR results from iColumn show higher successful rate in PCR amplification and sequencing.

ORDERING INFORMATION

| Product | Cat. No. |
|--|----------|
| AccuPure Circulating DNA Mini Kit (96 rxn) | D11096 |
| iColumn 12 Automated DNA/RNA Purification System | ABM1012 |
| iColumn 24 Automated DNA/RNA Purification System | ABM1024 |



AccuBioMed Co., Ltd.