magtivio

MagSi-cfDNA

Purification of circulating cell-free DNA from human plasma or serum

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MagSi-cfDNA is intended for (automated) purification of circulating cell-free DNA from human plasma or serum samples. Processing time for the automated preparation of 24 samples is about 60 minutes.

The kit requires no phenol/chloroform extraction or alcohol precipitation and eliminates the need for repeated centrifugation, vacuum filtration or column separation. It allows safe handling of potentially infectious samples. The obtained cfDNA can be used directly for downstream applications such as qPCR, or any kind of enzymatic reaction.

Features & Benefits

- Optimized for (automated) use on PurePrep 24
- Suitable for fresh or frozen plasma or serum samples
- Plasma can be collected with various blood collection tubes (Streck Cell-Free DNA BCT, EDTA, Citrate etc.)
- Reagents for 96 cfDNA extractions from 2 mL sample
- Scalable for use between 1 and 4 mL sample, support protocol for 10 mL sample volume available
- Typical yield: 0.5 to 4 ng cfDNA per mL of human plasma (but highly variable from donor to donor)
- Following lysis at 56°C all other steps are done at RT
- Does not require carrier RNA
- Magnetic beads are supplied in an optimized storage buffer for decreased sedimentation time
- Suitable for many enzymatic down-stream applications in particular RT-qPCR and sequencing
- Processing time for 24 samples: ~60 min
- Kit comes complete (no additional alcohols required)

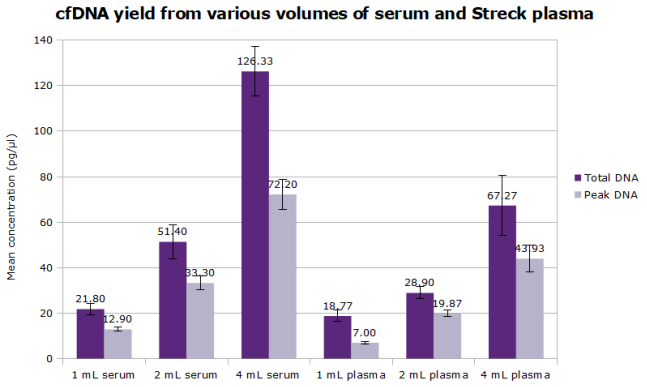

Figure 1: cfDNA yield from various volumes of serum and Streck plasma. cfDNA was quantified using an Agilent TapeStation 4150 assay (cell-free DNA assay). High cfDNA yields were obtained in a scalable way.

PurePrep 24 automated nucleic acid purification system

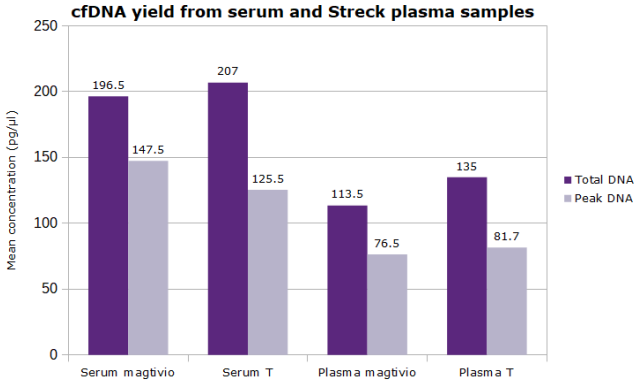

Figure 2: cfDNA yield from serum and Streck plasma samples. For serum, high yields (average of 2) were obtained in comparison to a competitor kit. The cfDNA yield was lower when plasma samples were used but the cfDNA percentage was higher (magtivio 64.6% vs T 60.5%).

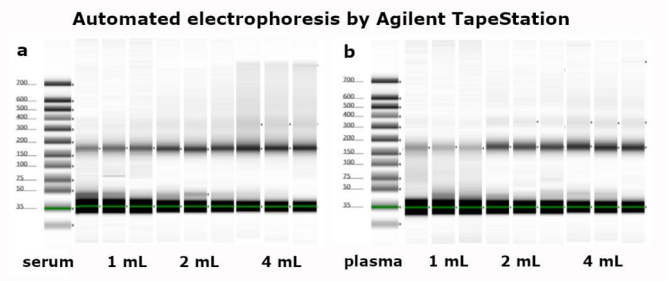

Figure 3: Automated electrophoresis by Agilent TapeStation 4150 showing high integrity of purified cfDNA from frozen a) serum and b) Streck plasma samples.

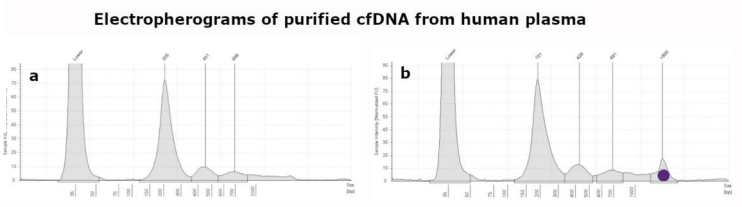

Figure 4. Typical electropherograms of purified cfDNA from human plasma collected in Streck BCT tubes (a) magtivio (b) competitor product T. High quality of cfDNA was obtained with the magtivio kit whereas the competitor kit shows high molecular weight DNA contamination (highlight).

Ordering Information

Art. No.	Description	Amount
MDKT00220096	MagSi-cfDNA	96 preps

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