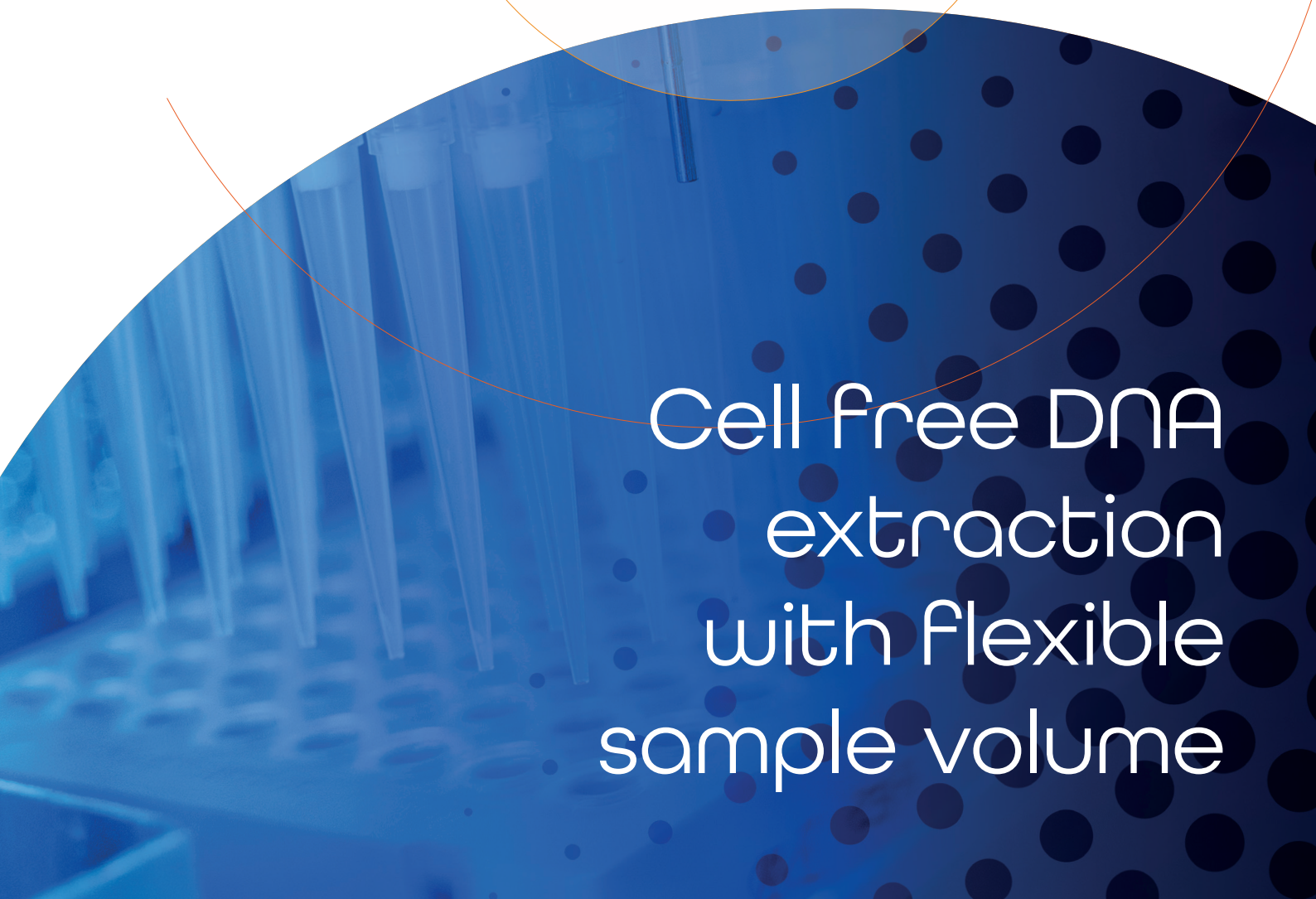
Clean NA

Clean Circulating

Large Volume DNA Kit



Cell free DNA extraction with flexible sample volume

A flexible start to your cell free DNA research

Cell free DNA (cfDNA) is hugely on the rise as a research and diagnostics tool in the medical world. Over the last years, cfDNA already had a huge impact on prenatal medicine. For oncology, transplant medicine and cardiovascular diseases it also becoming the new standard. Our Clean Circulating Large Volume DNA Kit helps researchers in the first step of the process: extracting the cfDNA.

Benefits:

- **Flexible (sample volume)**
- **Suitable for PCR/NGS**
- **Easy automation**

Our kit can process flexible volumes of serum and plasma, starting from 1 ml up to 4 ml. The Clean Circulating LV kit targets DNA fragments of 120 to 400 base pairs. Efficient removal of genomic DNA traces and the unique lysis buffer that releases the DNA from proteins and vesicles make the flexible Clean Circulating LV kit the first step to great results in qPCR, Next Generation Sequencing or other downstream applications.

Application

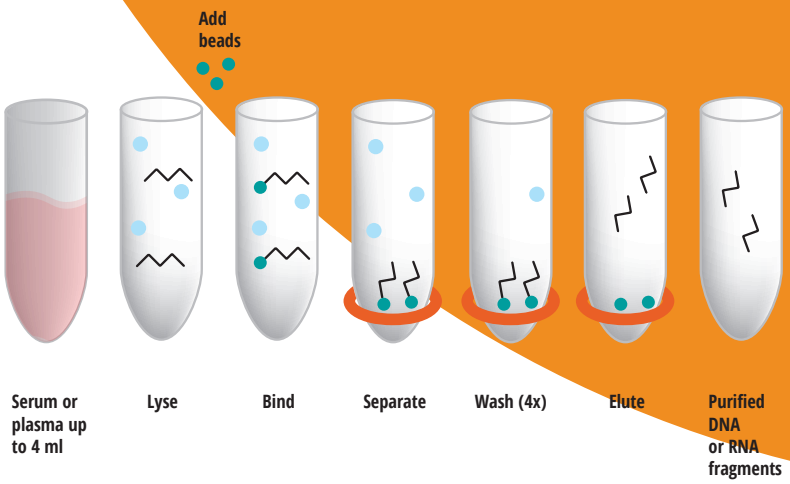
The cfDNA extracted by the Clean Circulating LV kit can be used for (q)PCR, Next Generation Sequencing, Sanger sequencing, SNP analysis, and more. Cancer diagnostics, prenatal screening, organ transplantation, and post trauma monitoring are some of the main fields where researchers apply cfDNA.

Proof of principle

We used unspiked plasma and plasma spiked with 10 ng/ml genomic DNA to show the extraction of cfDNA. Dynamic Device's LYNX LM900 performed the Clean Circulating LV extraction procedure. Afterwards, we analyzed the samples on the BiOptic Qsep100 bio-fragment analyzer.

Our Clean Circulating LV Kit particularly binds small DNA fragments, meaning that the genomic DNA should not be visible in the results. The electropherogram in Figure 1 contains 8 samples of unspiked plasma and shows a cfDNA peak. For the gDNA spiked samples (Figure 2), a cfDNA peak shows at the same time, meaning that the Clean Circulating LV kit enriched the cfDNA.

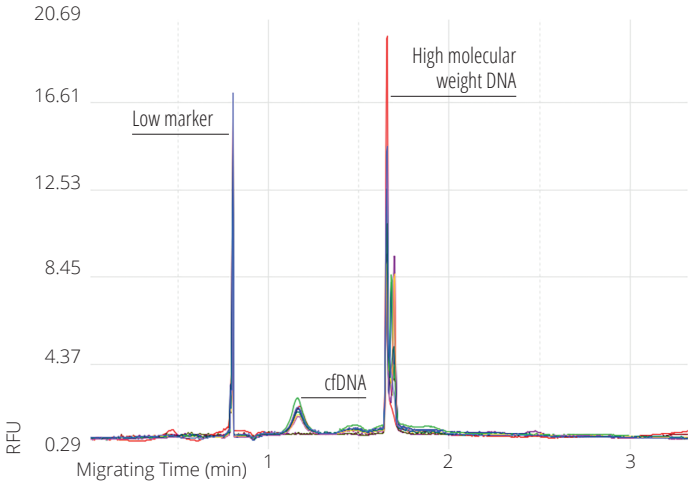
Workflow



First, the uniquely formulated lysis buffer releases the circulating DNA from proteins and vesicles while DNases and RNases are inactivated. After binding of the DNA to the magnetic beads, they can be separated from the lysate with a magnetic plate. Following a few rapid wash steps to remove trace contaminants, the purified DNA is eluted from the magnetic beads using an Elution Buffer.

FIGURE 1.

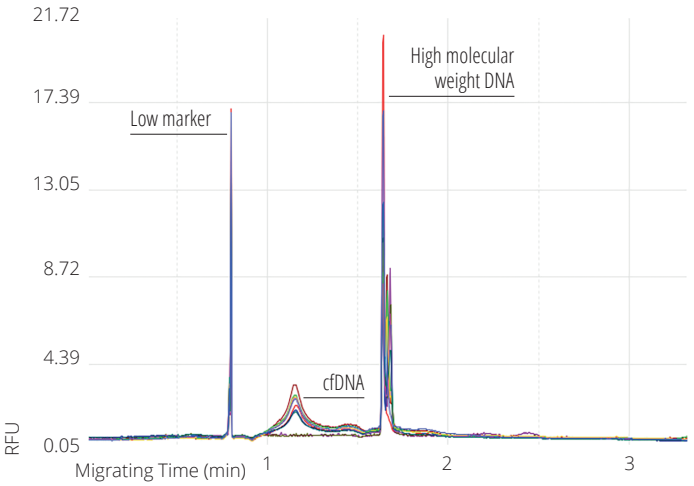
Electropherogram of 8 unspiked plasma samples after Clean Circulating Large Volume DNA & RNA Kit extraction.



Results Name
- Sample 1
- Sample 2
- Sample 3
- Sample 4
- Sample 5
- Sample 6
- Sample 7
- Sample 8
- Negative Control 1
- Negative Control 2

FIGURE 2.

Electropherogram of 8 spiked plasma samples (10 ng/ml gDNA) after after Clean Circulating Large Volume DNA & RNA Kit extraction.



Results Name
- Sample 9
- Sample 10
- Sample 11
- Sample 12
- Sample 13
- Sample 14
- Sample 15
- Sample 16
- Negative Control 1
- Negative Control 2

About CleanNA

Isolation of nucleic acids often comes with challenges and CleanNA thinks that no researcher should have to face them alone. At our facilities in the Netherlands, we produce nucleic acid isolation kits and reagents. We offer complete solutions with magnetic beads that meet researcher's needs while significantly reducing their hands-on time.

Ready to order?

Order via your local distributor or contact us via our details below.

Order info

Product	Preps	Part number
Clean Circulating LV DNA Kit	4	CCLV-D0004
Clean Circulating LV DNA Kit	96	CCLV-D0096
Clean Circulating LV DNA Kit	384	CCLV-D0384

Product	Pack Size	Part number
Clean Magnet Plate 96-Well	1 Plate	CMAG-96-RN50

The Clean Circulating Large Volume DNA Kit is distributed by:

Contact

CleanNA | Coenecoop 75 | 2741 PH Waddinxveen | The Netherlands
T: +31 (0) 182 22 33 50 | F: +31 (0) 182 22 33 98 | info@cleanna.com
www.cleanna.com