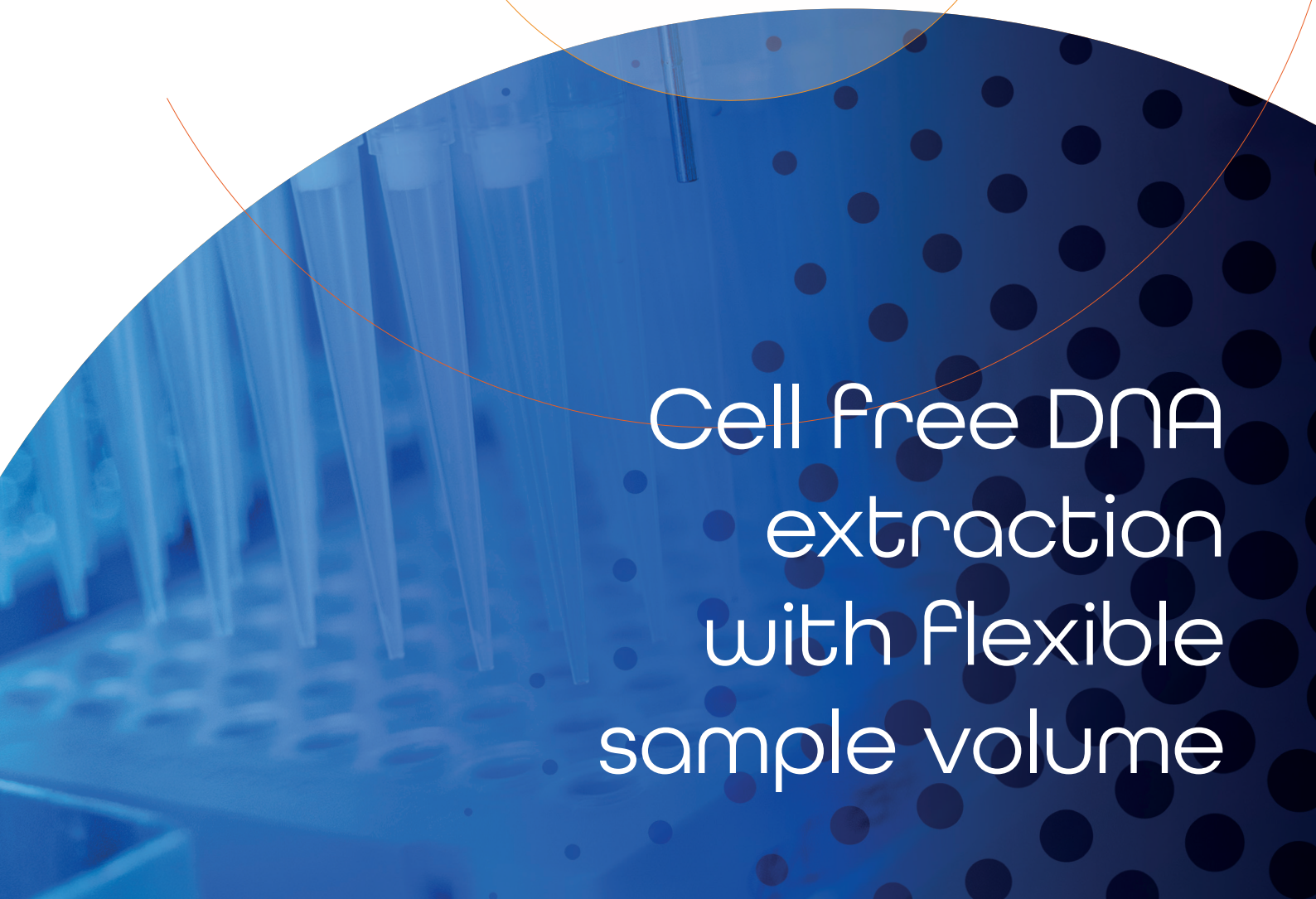
Clean NA

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 is 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**
- **Easy automation**

Our kit can process flexible volumes of serum and plasma, starting from 1 ml up to 4 ml. The Clean Circulating LV DNA Kit targets DNA fragments of 120 to 400 base pairs. Enrichment of these short DNA fragments and the unique lysis buffer that releases the DNA from proteins and vesicles make the flexible Clean Circulating LV DNA Kit the first step to great results in downstream applications.

Application

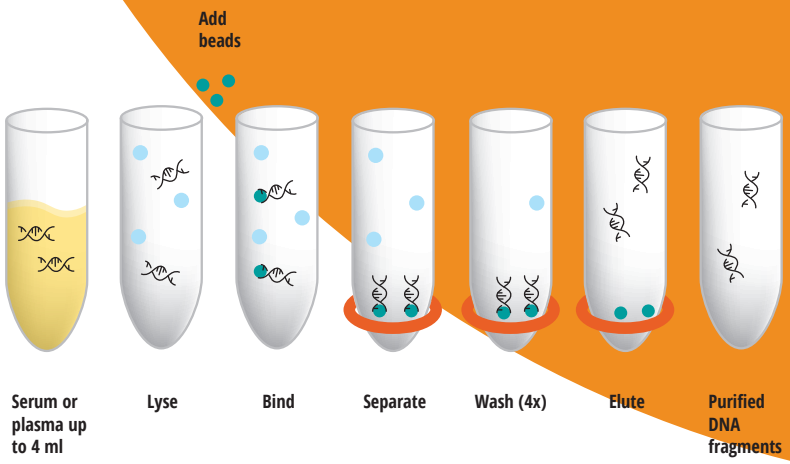
The cfDNA extracted by the Clean Circulating LV DNA Kit can directly be used for (q)PCR. Cancer diagnostics, prenatal screening, organ transplantation, and post trauma monitoring are some of the main fields where scientists apply cfDNA.

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 DNA Kit extraction procedure. Afterwards, we analyzed the samples on the BiOptic Qsep100 bio-fragment analyzer.

Our Clean Circulating LV DNA 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 DNA Kit enriched the cfDNA.

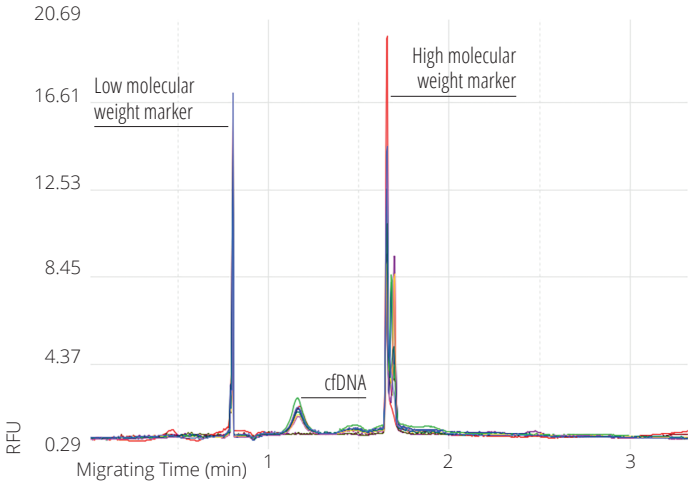
Workflow



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.

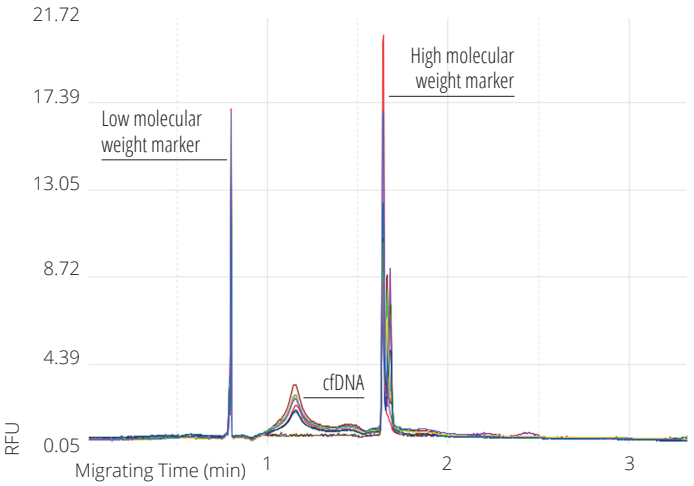
Electropherogram of 8 unspiked plasma samples after Clean Circulating Large Volume DNA Kit extraction.



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 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

CleanNA is a Dutch manufacturer of magnetic bead-based nucleic acid extraction kits. We produce our reagents according to our EN-ISO 13485 certified quality management system and our kits are easy to automate on general liquid handling systems. CleanNA's product portfolio includes kits for extraction from a range of sample types, both for research and diagnostic procedures.

ISO 13485 BUREAU VERITAS Certification

Our quality management system is EN-ISO 13485 certified by Bureau Veritas

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

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:

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