

InnuPure C12 | Extraction System

- Nucleic Acid and Protein Purification Robot
- Fast, reliable and efficient
- High operating convenience



InnuPure C12 | Extraction System

Unique fast walk-away principle

The InnuPure C12 is a new, flexible and efficient extraction system for the completely automated isolation and purification of nucleic acids and proteins.

The system, which was developed and produced in Germany, is designed for small and medium sample throughput. A wide range of starting materials can be processed. The system combines a unique way of performing liquid handling steps with an extremely fast walk-away principle.

- Flexible and efficient extraction system
- For numerous types of starting materials
- Completely automated and compact

The InnuPure C12 is equipped with preinstalled application protocols to eliminate time-consuming programming. The high degree of flexibility of InnuPure C12 allows the isolation of DNA or RNA from up to twelve samples in parallel. The work intensive steps for sample lysis that were often necessary up to now are now incorporated into the automated extraction process.

- Very simple operation
- Pre-programmed protocols
- Up to twelve samples in parallel

The nucleic acids to be isolated are adsorbed to surface-functionalized paramagnetic particles. The required extraction chemistry is optimally adapted to the application at hand and facilitates the isolation of very pure nucleic acids with excellent yields.

- Adsorption of the isolated material to magnetic or paramagnetic particles
- Isolation of very pure nucleic acids

The extraction principle effectively prevents cross contamination, a problem that frequently occurs in vacuum-based extraction methods. The isolated nucleic acids can be used immediately afterwards for downstream applications.

Extraction kits optimized for InnuPure C12 are available for the isolation of genomic DNA, cellular RNA, viral or bacterial nucleic acids, as well as the processing of forensic samples. The extraction process requires between 20 and 40 minutes, depending upon application.

- No cross contamination
- High reproducibility
- Very rapid extraction of genomic DNA, cellular RNA, viral and bacterial nucleic acids
- Processing of forensic samples



Application example

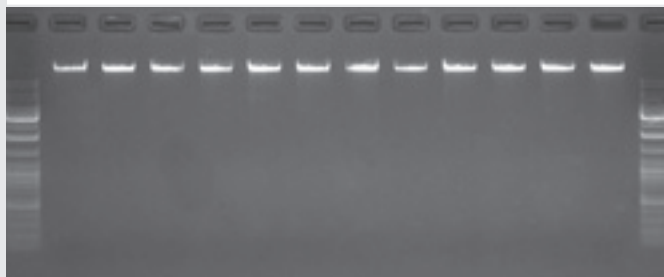
Isolation of genomic DNA from 200 µl aliquots of whole blood

Total duration of the preparation: 40 min; Process comprised the complete isolation without manual intervention (including automated loading of the reaction containers and automated lysis of the whole blood samples).

Photometric measurement of the isolated DNA

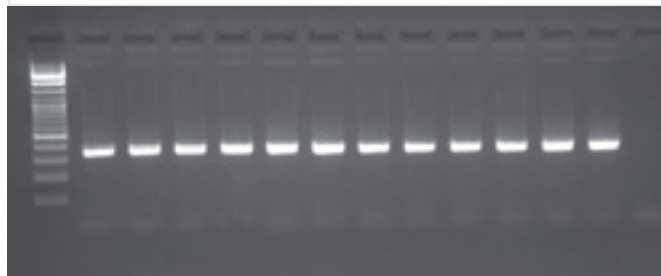
Sample	Yield in µg	Ratio A260:A280
1	4.2	1.8
2	4.3	1.8
3	4.4	1.8
4	4.4	1.7
5	4.8	1.8
6	4.8	1.7
7	4.4	1.8
8	4.8	1.9
9	4.4	1.9
10	4.6	1.7
11	4.5	1.8
12	4.7	1.8

Isolated genomic DNA after gel electrophoresis



■ In each gel lane, 10 µl of the DNA eluted in a total volume of 200 µl was applied. TAE agarose gel stained with ethidium bromide. DNA ladder was applied on the left and right sides of the gel.

Use of the isolated genomic DNA isolated from 200 µl starting material for the amplification of a human specific target sequence. Amplification was performed in a SpeedCycler.

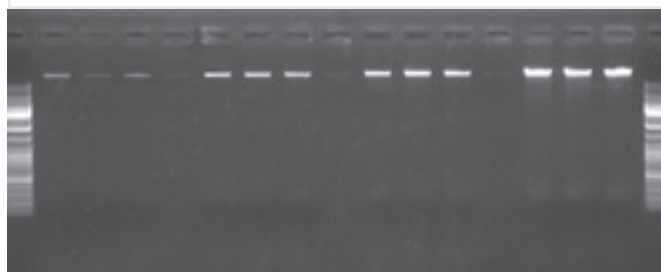


■ Left side: DNA ladder, all other lanes were loaded with the respective PCR products from the samples shown in the first gel.

Application example

Isolation of genomic DNA from different starting amounts of whole blood (10, 50, 100 and 200 µl)

Isolated genomic DNA after gel electrophoresis



■ In each gel lane, 10 µl of the DNA eluted in a total volume of 200 µl was applied. TAE agarose gel stained with ethidium bromide. DNA ladder was applied on the left and right sides of the gel.
Samples : 1-3 = 10 µl starting material
Samples : 4-6 = 50 µl starting material
Samples : 7-9 = 100 µl starting material
Samples : 10-12 = 200 µl starting material

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Subject to changes in design and scope of delivery
as well as further technical development!