

Samplettype **i-sep® SQ** DNA separation

Quantitative release and separation of DNA in one system

Samplettype **i-sep® SQ** are developed for quantitative DNA extraction procedures to provide DNA lysates of highest quality. The proprietary filter material allows the sample lysis and separation of DNA in the same device without any manual transfer of the substrate or additional pipetting steps. The novel column system is ideally suitable for DNA extraction procedures involving a diversity of specimens such as clinical or forensic sample material.

- Improved yield, reproducibility, and overall purity of isolated DNA
- Improved process flow
- No manual transfer of the substrate
- No extra pipetting steps
- Lysis and separation in the same device without extra pipetting steps
- Quantitative recovery of lysate in a simple and fast separation of substrate from lysate with the unique filter column
- Closed system that minimizes the risk of cross-contaminations and mix-ups
- Compatible to any consecutive DNA isolation, both manual and automated

Product description

The quantity and quality of genomic DNA extracted from any sample can greatly impact the success of the downstream analysis and the overall quality of the final result. This is particular the case for patient samples or field specimens which might be limited in quantity, may be environmentally exposed, and may require purification from difficult substrates containing PCR inhibitors. The overall efficiency is improved, and the DNA-isolation process optimised by carrying out the lysis directly in the column with subsequent quantitative recovery of the lysis buffer. Samplettype **i-sep® SQ** are based on the established mini spin-column format containing a special filter compartment which prevents flow-through of different kinds of liquid without any centrifugal force. They retain solutions within the column even during heat incubation and shaking. Upon centrifugation, the solution passes the column into the collection tube. Samplettype **i-sep® SQ** are recommended in particular for clinical and forensic specimens.

Specifications

Recommended filling volume: 200 - 500 µl

Maximal recommended centrifugation force: 13.400 rpm

Temperature stability: ≤ 95 °C

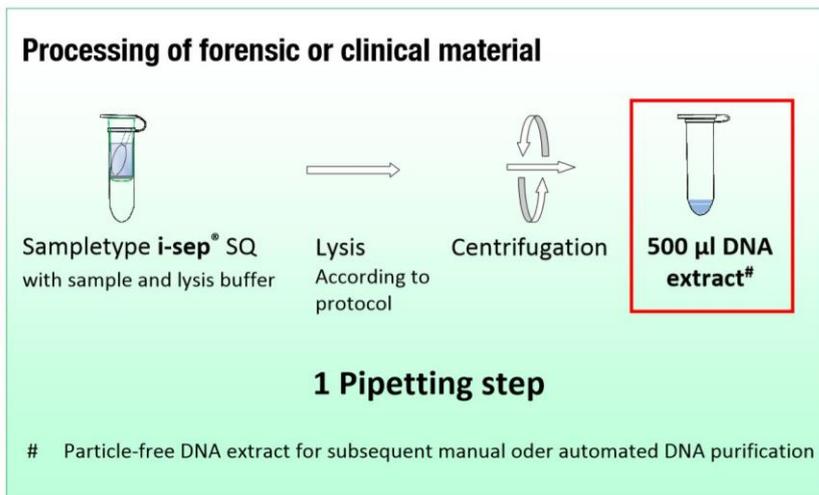
Ethylene oxide sterilised to guarantee an RNA, DNA, RNase and DNase free product

Instruction for use

Samplettype **i-sep® SQ** are developed for sample lysis to quantitatively separate released nucleic acid. The proprietary filter material allows the lysis and separation to be carried out in the same device and without extra pipetting steps. A closed design minimizes the risk of cross-contaminations.

The usability of Samplettype **i-sep® SQ** is exemplarily described using the lysis of clinical nail sample.

1. Place a Samplettype **i-sep® SQ** into a 2 ml collection tube.
2. Place the specimen (e.g. nail chips) into the Samplettype **i-sep® SQ** filter compartment.
3. Carry out the first step of the lysis by adding the lysis buffer 1 and incubating the samples in a thermo shaker (95°C, 850 rpm for 15 min)
4. Neutralize the lysis buffer and add the lysis enzyme (e.g. proteinase K) and incubate the sample over night (e.g. 56°C, 850 rpm).
5. Centrifuge at 13.500 rpm for 10 min to transfer the lysate quantitatively from the filter compartment into the collection tube.
6. Remove the Samplettype **i-sep® SQ** spin column from the collection tube and discard it. The eluate contains the DNA and can be used for further nucleic acid purification.



The closed system allows a comfortable but also very effective workflow and simultaneously diminishes the risk of cross contaminations and swapping of the samples. Lysates can be processed further either manually or on automated platforms.

Product use limitations

Sampletype **i-sep**[®] **SQ** are developed, designed and sold for research purpose only.

Quality control

All products undergo an intensive quality assurance process at Biotype Diagnostic GmbH. The Biotype diagnostic GmbH is accredited under DIN EN ISO 9001:2015. In accordance with our ISO-certified Quality Management System, each lot of Sampletype **i-sep**[®] **SQ** is permanently controlled in order to ensure unrestricted usability and consistent product quality. Please contact us if you have any questions regarding quality assurance.

Product warranty

The Biotype Diagnostic GmbH guarantees the performance of all products in the manner described in our product literature. The purchaser must determine the suitability of the product for its particular use. Should any product fail to perform satisfactorily due to any reason other than misuse, the Biotype Diagnostic GmbH will replace it free of charge. We reserve the right to change, alter, or modify any product to enhance its performance and design. Please inquire for more information. A copy of our terms and conditions can be found on the back of your invoice.

Technical assistance

The Biotype Diagnostic GmbH provides a high quality technical support. Our support is staffed by experienced scientists with extensive practical and theoretical expertise in sample and assay technologies and the use of our products. If you have any questions or experience any difficulties regarding the Sampletype **i-sep**[®] **SQ**, please do not hesitate to contact us. Our customers are a major source of information regarding advanced or specialized uses of our products. This information is helpful to other scientists as well as to our team. We therefore encourage you to contact us if you have any suggestions about product performance or new applications and techniques. For technical assistance and more information, please see our website www.biotype.de, send us an email support@biotype.de or give us a call +49 (0)351 8838 400.

Order details:

Sampletype **i-sep**[®] **SQ** (50) - Order number 61-00201-0050

Sampletype **i-sep**[®] **SQ** (250) - Order number 61-00201-0250

Sampletype **i-sep**[®] **SQ** (500) - Order number 61-00201-0500

Related products: Sampletype **i-sep**[®] **DL** and Sampletype **i-sep**[®] **DL-MB**

For more information about our quantitative DNA extraction systems, please do not hesitate to contact us.