

Samplettype i-sep® SQ-MB (70-13702-0020 / 70-13702-0250 / 70-13702-0500)

Package Insert

Quantitative release and separation of DNA in one system

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For research use only. Not for use in diagnostic procedures.

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70-13702-0020
70-13702-0250
70-13702-0500



20 / 250 / 500



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1 PRODUCT DESCRIPTION

Samplettype i-sep® SQ-MB is developed for quantitative DNA extraction procedures to provide DNA lysates of highest quality. 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 novel column system is ideally suitable for DNA extraction procedures involving a diversity of specimens such as forensic sample material.

Samplettype i-sep® applications are intended exclusively for professional use in specialized laboratories. Personnel should be trained in the techniques of nucleic acid extraction. **For research use only. Not for use in diagnostic procedures.**

2 TEST PRINCIPLES

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 particularly the case for 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 optimized by carrying out the lysis directly in the column with subsequent quantitative recovery of the lysis buffer **Samplettype i-sep® MB**. **Samplettype i-sep® SQ** is 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 lysate passes the column into the

Samplettype i-sep® Collection Tube. The product is recommended in particular for forensic specimens.

3 CONTENT AND ORDERING INFORMATION

Please send your order as email to sales@biotype.de.

The **Samplettype i-sep® SQ** kit is sufficient to perform 20, 250 or 500 reactions and includes the following components:

Component	Pieces per packaging size			Tube color	Storage
	20	250	500		
Ordering number	70-13702-0020	70-13702-0250	70-13702-0500		
Samplettype i-sep® SQ Filter Columns	20	250	500	Green	15 °C to 25 °C
Samplettype i-sep® Collection Tubes	20	250	500	Natural	15 °C to 25 °C
Samplettype i-sep® MB	10 mL	125 mL	2 x 125 mL	-	15 °C to 25 °C

4 ADDITIONAL REQUIRED INSTRUMENTS AND REAGENTS

The **Samplettype i-sep® SQ-MB** is used together with commercially available kits for the extraction of genomic DNA.

Additional required instruments and reagents:

- Pipets and tips, disposable gloves
- Incubator/ heat block and centrifuge
- QIAGEN Proteinase K (Cat No./ID: 19131, QIAGEN)

5 STORAGE CONDITIONS

Samplettype i-sep® SQ-MB is sent at ambient temperature. If the packaging is damaged during transport, contact Biotype® GmbH (support@biotype.de) for further assistance.

The product must be stored at 15 °C to 25 °C.

The shelf life of the product is mentioned on the packaging label.

6 WARNING AND SAFETY INSTRUCTIONS

Samplettype i-sep® MB: Warning: causes serious eye irritation. (H319)

Please pay attention to the safety data sheets of Biotype® products, which we will gladly send you on request (support@biotype.de).

Read the instructions carefully before using the product.

Use only maintained and calibrated devices to perform the DNA extraction with **Samplettype i-sep® SQ-MB**.

When using **Samplettype i-sep® SQ-MB**, wear gloves, a lab coat and eye protection.

Store **Samplettype i-sep® SQ-MB** physically separated from specimen or control material.

Additional controls may be required as per the policies or requirements of local, state, and / or federal regulations or accreditation organizations.

Do not use the **Samplettype i-sep® SQ-MB** if it is past its expiration date.

Discard specimen and process waste according to local safety regulations or store for further analysis.

7 QUALITY ASSURANCE

Biotype GmbH provides intensive quality assurance for the entire content of the test kit. The quality of the test kit is continuously checked to ensure unrestricted usability. Please contact us if you have any questions regarding quality assurance (info@biotype.de).

8 TECHNICAL ASSISTANCE

For technical assistance or information, please call Biotype at +49 351 8838 400 or contact us via support@biotype.de.

9 Specifications

- Recommended filling volume: 200 – 500 µL
- Maximal recommended centrifugation force:
19,390 g/r = 95 mm (13,500 rpm)
16,330 g/r = 80 mm
- Temperature stability: ≤ 60 °C
- Ethylene oxide sterilized to guarantee a RNA, DNA, RNase and DNase free product

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10 WORKFLOW SAMLETYPE I-SEP® SQ-MB DNA SEPARATION

Preparation lysis buffer working solution

- Combine 480 µL **Samplettype i-sep® MB** lysis buffer with 20 µL Proteinase K (20 mg/mL)
Note: Use created working solution immediately after mixing and preheat to 56 °C

I. Sample preparation

- Place a **Samplettype i-sep® SQ Filter Column (green)** into a 2 mL **Samplettype i-sep® Collection Tubes**. Place forensic sample material into the filter column.

II. Sample lysis

- Add up to 500 µL lysis buffer **working solution** (preheat to 56 °C) until the sample is completely covered
- Incubate for **60 min at 56 °C** in an incubator without shaking (or use a closed heat block suitable for 2 mL tubes).

III. DNA separation

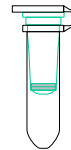
- Centrifuge** at 19,390 g / 13,500 rpm for 5 min to transfer the lysate quantitatively from the filter basket into the collection tube.
- Remove the **Samplettype i-sep® SQ Filter Column** from the collection tube and discard it.
- The lysate in the **Samplettype i-sep® Collection Tube** contains DNA. Use this lysate for further DNA purification and analysis.

11 TRADEMARK AND DISCLAIMER

Biotype® is a registered trademark of Biotype GmbH, i-sep® is a registered trademark of VIBOD (or Meido) GmbH. Other registered names, trademarks, etc. used in this document, even if not specifically marked as such, are not to be considered unprotected by law.

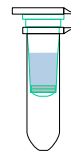
The manufacturer gives no warranty for any application which is regulated by law in the countries of end-users. Thus, the end-users assume sole responsibility for regulatory compliance of its application(s).

I. SAMPLE PREPARATION



- Place an **Samplettype i-sep® SQ Filter Column (green)** into a 2 mL **Samplettype i-sep® Collection Tube**. Place the forensic sample material into the filter column.

II. SAMPLE LYSIS



56 °C
60 min /
(77 g / r = 9.5 mm
(850 rpm) optional)

- Add up to 500 µL lysis buffer **Samplettype i-sep® MB*** + Proteinase K (480 µL **Samplettype i-sep® MB** + 20 µL of 20 mg/mL Proteinase K). Proteinase K is not included in the kit.

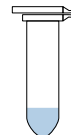
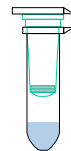
*preheated to a temperature of 56 °C

- Incubate for 60 min at 56 °C in an incubator without shaking (or use a closed heat block suitable for 2 mL tubes).

III. DNA SEPARATION



5 min / 19,390 g
r = 95 mm
(13,500 rpm)



- Centrifuge at 19,390 g / 13,500 rpm for 5 min to transfer the lysate quantitatively from the filter basket into the collection tube.

- Remove the **Samplettype i-sep® SQ Filter Column** from the collection tube and discard it.



The lysate in the collection tube contains the DNA. Use this lysate for further DNA purification (compatible to manual and automated DNA purification).