Medical–Biological
Research & Technologies

MagSorb-16

Magnetic rack for manual nucleic acid extraction

User instructions

1. Safety Precautions

Caution! Make sure you have fully read and understood the present Manual before using the equipment. Please pay special attention to sections marked by this symbol.

Caution! **Magnetism!** Effects of a strong magnetic field on the biological systems have to be taken into account. Magnetic fields can affect heart pacemaker, data carriers, etc.

- Use only as specified in the user instructions provided.
- Save the unit from shocks or falling.
- Store and transport the unit at ambient temperatures between -20°C and +60°C and maximum relative humidity of 80%.
- Before using any cleaning or decontamination methods except those recommended by the manufacturer, check with the manufacturer that the proposed method will not damage the equipment.
- Do not make modifications to the design of the unit.
- It is the user's responsibility to carry out appropriate decontamination if hazardous material is spilt on the equipment.

2. General Information

Biosan presents the complete line of necessary instrumentation to utilize magnetic bead extraction kits and protocols from various manufacturers and meet the most demanding user requirements.

The one of the foundations of this line is MagSorb-16 which is a magnetic rack that easily accommodates up to 16 single use tubes (1.5 – 2 ml).

Different manufacturers offer wide range of magnetic NA extraction kits, but all of them are based on magnetic particles and utilize the same principles of extraction. Every step of extraction on magnetic particles is crucial, so it is important to choose the right equipment for effective NA purification.

3. Setup and operation

3.1. **Unpacking**. Remove packing materials carefully and retain them for future shipment or storage of the unit. Examine the unit carefully for any damage incurred during transit. The warranty does not cover in-transit damage. Warranty covers only the units transported in the original package.

3.2. **Complete set**. Package contents:

- Magnetic stand ..... 1 pce
- User instructions ..... 1 copy

3.3. **Setup**. Place the magnetic stand on even horizontal surface.

3.4. **Operation**. Use the rack according to your NA extraction protocol.

Caution! The rack contains several rare-earth magnets. Magnetic fields can affect heart pacemaker, data carriers, etc. Contact with other magnets or ferromagnetic materials may damage the unit or the user.

4. Specifications

4.1. The unit is designed for operation in cold rooms, incubators (except CO_2 incubators) and closed laboratory rooms at ambient temperature from +4°C to +40°C.

4.2. Biosan is committed to a continuous programme of improvement and re-serves the right to alter design and specifications of the equipment without additional notice.

4.3. **Specifications**:

4.3.1. Number of tubes ..... up to 16

4.3.2. Tube volume ..... 1.5 – 2 ml

4.3.3. Tube manufacturer ..... Eppendorf or equivalent

4.3.4. Dimensions ..... 160x50x50 mm

4.3.5. Empty weight, accurate up to ±10% ..... 240 g

5. Maintenance and cleaning

5.1. **Maintenance**. If the unit requires maintenance, contact Biosan or your local Biosan representative.

5.2. **Cleaning and disinfection**. Use mild soap and water with a soft cloth or sponge for cleaning the unit. Rinse remaining washing solution with distilled water. Wipe dry the excess water with clean, soft cloth or sponge.

5.2.1. **Decontamination**. We recommend using a special DNA/RNA removing solution (e.g., Biosan PDS-250, DNA-Exitus Plus™, RNase-Exitus Plus™).

5.2.2. **Tube holders**. The tube holders are made of acrylic glass (polymethyl methacrylate, Plexiglas®) and are prone to scuffing and scratches if improperly cleaned. Care during cleaning is recommended to reduce the wear on the acrylic glass surface.

Caution! Never use organic solvent-based compounds, pure alcohol, alcohol-containing cleaners (more than 20%) or ammonia-containing cleaners for acrylic glass. Do not use abrasives. The table below shows the interaction of acrylic glass with ethyl alcohol and other solutions.

Solvent	Effect on acrylic glass
Biosan PDS-250	No reaction
DNA-Exitus Plus™	No reaction
RNase-Exitus Plus™	No reaction
H_2O_2 6%	No reaction
Ethyl alcohol ≤20%	No reaction
Ethyl alcohol >20%	Increasing reaction. Do not use!

Note. Crazing is a normal process for acrylic glass exposed to direct UV light. Crazing will occur over time. Crazing may occur within the warranty period and is regarded as normal wear and not covered by the warranty.

6. Warranty

6.1. The Manufacturer guarantees the compliance of the unit with the requirements of Specifications, provided the Customer follows the operation, storage and transportation instructions.

6.2. The warranted service life of unit from date of delivery to the Customer is 24 months.

6.3. Warranty covers only the units transported in the original package.

6.4. If any manufacturing defects are discovered by the Customer, an unsatisfactory equipment claim shall be compiled, certified and sent to the local distributor address. Please visit the **Technical support** section on our website at the link below to obtain the claim form.

Technical support

biosan.lv/en/support

6.5. The following information will be required in the event that warranty or post-warranty service comes necessary. Complete the table below and retain for your records.

Model	Serial number	Date of sale
MagSorb-16, Magnetic rack for manual nucleic acid extraction		

Biosan SIA
Ratsupites 7 k-2, Riga, LV-1067, Latvia
Phone: +371 6742 6137
https://biosan.lv

Edition 2.01 – November of 2024