GE Healthcare Life Sciences

Instructions 28-9876-29 AA

Mag Sepharose™

MagRack Maxi



Product description

MagRack Maxi is designed for purification of sample volumes up to 50 ml using magnetic beads. The rack consists of an anodized aluminium housing (blue) with a detachable plastic bar (white) containing a neodymium magnet. One 15 ml tube and one 50 ml tube can be placed in the rack. Falcon™ polypropylene tubes (BD Biosciences Labware) are recommended. Once the tubes are placed in the rack with the magnet inserted, the magnetic beads are attracted to the magnet within a few seconds. This enables easy removal of the supernatant while the magnetic beads are left in the tube.

MagRack Maxi offers high flexibility during purification. Using large sample volumes, up to 50 ml, makes it possible to obtain high amounts of target protein in a single run. Also, starting with large sample volumes is an advantage for capture of target proteins with low expression levels.

MagRack Maxi is ideal for use with GE Healthcare's products containing magnetic beads, for example, Protein A Mag Sepharose Xtra, Protein G Mag Sepharose Xtra, His Mag Sepharose Ni and Streptavidin Mag Sepharose.



Intended use

MagRack Maxi is intended for research use only.

Safety precautions



WARNING! Strong magnetic field which may affect users with pacemaker; a magnetic field with strength above 1 millitesla is present up to 60 mm from the pointed direction of the neodymium magnet bar.

General protocol

MagRack Maxi can be used for direct scale-up of the protocol used for small-scale purification (1.5 ml microcentrifuge tubes and MagRack 6, see instructions for the various magnetic bead products supplied by GE Healthcare). Scale-up is used when larger amounts of target protein are needed. For direct scale-up, the bead slurry volume, the sample size and the buffer volumes for equilibration, wash and elution are scaled up by the same factor (e.g., multiplied by 10).

MagRack Maxi can also be used for capture of low-expressed target proteins from large sample volumes of up to 50 ml. In that case, a smaller volume of gel slurry is needed (compared with direct scale-up). The volume of the gel slurry depends on the total amount of target protein to be captured. The volume of the buffers for equilibration, wash and elution are adjusted according to the volume of the gel slurry.



Fig 1. MagRack Maxi (blue) with the magnetic bar (white) inserted (A); and removed (B).

General handling:

- Add the homogeneous magnetic bead slurry into the 15 or 50 ml tube and place the tube in the rack.
- Insert the magnetic bar entirely. Invert the tube gently until the beads are attracted to the magnet. Carefully remove the liquid.
- Remove the magnetic bar from the rack before application of liquid (for example equilibration buffer, sample solution, wash buffer or elution buffer).
- During incubation the magnet should not be inserted into the rack. Mix the liquid with the magnetic beads by rolling MagRack Maxi horizontally on a rolling table (alternatively, remove the tube and incubate end-over-end).
- After mixing, insert the magnetic bar again and remove the liquid.
- **Note:** For further advice on handling and protocol details, see instructions for the various magnetic beads products supplied by GE Healthcare.

Cleaning and disinfection

- Clean by wiping the rack with a damp cloth.
- Disinfect the rack with 70% ethanol.

Storage

Store MagRack Maxi in a dry environment at room temperature.

CAUTION! Do not expose the plastic magnetic bar to temperatures greater than 80°C.

Ordering information

Product	Quantity	Code No.
MagRack Maxi	1	28-9864-41
Related products	Quantity	Code No.
MagRack 6	1	28-9489-64
Protein A Mag Sepharose	$1 imes 500 \ \mu$ l 20% medium slurry	28-9440-06
Protein A Mag Sepharose	$4 imes 500~\mu$ l 20% medium slurry	28-9513-78
Protein G Mag Sepharose	$1 imes 500 \ \mu$ l 20% medium slurry	28-9440-08
Protein G Mag Sepharose	$4 imes 500~\mu$ l 20% medium slurry	28-9513-79
NHS Mag Sepharose	$1 imes 500 \ \mu$ l 20% medium slurry	28-9440-09
NHS Mag Sepharose	$4 imes 500~\mu$ l 20% medium slurry	28-9513-80
TiO ₂ Mag Sepharose	$1 imes 500 \ \mu$ l 20% medium slurry	28-9440-10
TiO ₂ Mag Sepharose	$4 imes 500~\mu$ l 20% medium slurry	28-9513-77
Protein A Mag Sepharose Xtra	2×1 ml 10% medium slurry	28-9670-56

Related products	Quantity	Code No.
Protein A Mag Sepharose Xtra	$5 \times 1 \text{ ml} 10\%$ medium slurry	28-9670-62
Protein G Mag Sepharose Xtra	2×1 ml 10% medium slurry	28-9670-66
Protein G Mag Sepharose Xtra	5×1 ml 10% medium slurry	28-9670-70
His Mag Sepharose Ni	2×1 ml 5% medium slurry	28-9673-88
His Mag Sepharose Ni	5×1 ml 5% medium slurry	28-9673-90
His Mag Sepharose Ni	10 × 1 ml 5% medium slurry	28-9799-17
Streptavidin Mag Sepharose	2×1 ml 10% medium slurry	28-9857-38
Streptavidin Mag Sepharose	5×1 ml 10% medium slurry	28-9857-99

For local office contact information, visit www.gelifesciences.com/contact

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