

IMAG™ Hand-Held Device

Transforming Low Throughput To High Throughput Separation By A Flick Of A Tube Or A Plate

The use of paramagnetic bead based separation devices (MSDs) are an essential accessory in any magnetic bead based purification process. However, the use of MSDs are not manual friendly and mostly requires electrically powered liquid handling systems. The IMAG MSDs in its tube or plate formats are designed to simplify the manual processing of magnetic bead based separation applications including:

- Nucleic Acid Purification & Clean Up
- Cell Based Assays
- Antibody & protein Purification

Features & Benefits

- IMAG MSDs accommodate for single tube or 96 microplate format
- IMAG MSDs increase operational efficiency
 - Fast separation time: The design includes strong magnets providing less than 30 seconds separation time
 - Reduce cost of consumables and processing time: Designed to hold the plate or tube in place for faster disposal of unwanted liquids and thus reduce the need for extra pipetting steps and saving on tips.
 - Manually operated with low to high throughput capabilities: Ideal pack up system when your expensive liquid handler down or power outage scenarios

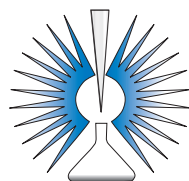
Work Instructions:

IMAG MSD 96 well microplate format:

1. The clip system height can be adjusted with the large Allen key provided with the magnet. The Allen key operated screw is located in the bottom of the IMAG MSDs. The height of the clip system needs to be adjusted based on the type of plate being used for the separation process while the clips are pushed all the way back. The IMAG-96P has an extra set of clips to accommodate 0.5 mL 96 well microplates. Use the small Allen key to swap the set of clips or tighten them.



Tools For Life Science Discovery



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Work Instructions (Continued):

IMAG MSD 96 well microplate format:

2. When the desired height for the proper plate is achieved, the clips need to be pushed forward to hold the plate in place. To ensure optimal separation make sure there is no air gap between the magnets and the bottom of the plate.
3. The beads will aggregate to the side of the well. The excess fluid can be removed by flipping the plate up-side down into a deep well reservoir.
4. While the plate is in the up-side down position tap it gently 3 to 5 times on a clean, thick pad of tissue to remove any residual fluid in the wells. Leave the plate in the IMAG MSDs in the up-side-down-position for 1 to 2 minutes to allow the residual fluid to diffuse through the tissue. This will ensure optimal removal of any residual fluid.

Note: PCR plates have narrow wells, which increases surface tension and makes removing the excess fluid of the original sample from the beads difficult. For such plates the use of a pipette is recommended to fully remove the supernatant.

5. Repeat step 4 for washing. In this step there is no need to use a pipette.

Work Instructions

IMAG MSD 12-Tube format:

1. Separate the top rack portion from the magnet bearing base. Screw in the 0.5, 1.5, or 2.0 mL tubes into the designated holes to affix the desired tube to the top part of the IMAG-12T MSD.
2. When the magnetic beads are added to the solution in the tubes, assemble the top part of the rack with the magnet bearing part to initiate the separation process.
3. The beads will aggregate to the side of the tube closest to the magnets. The excess fluid can be removed by flipping the assembled IMAG-12T up-side-down into a deep well reservoir.
4. While the assembled rack is in the up-side-down position tap it gently 3 to 5 times on a clean, thick pad of tissue to remove any residual fluid in the tubes. Leave the assembled rack in the IMAG-12T MSD in the up-side-down position for 1 to 2 minutes to allow the residual fluid to diffuse through the tissue. This will ensure optimal removal of any residual fluid.
5. Repeat Step 4 for washing
6. Remove the top rack from the magnet bearing part for non MSD requiring steps such as vortexing and incubation.



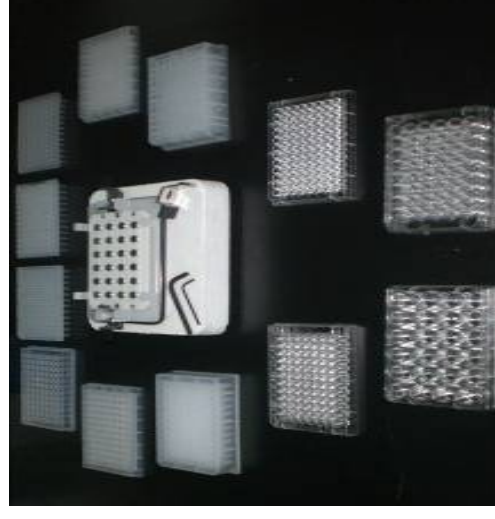
IMAG Handheld Magnetic Separation Devices Selection Guide:

The IMAG MSDs handheld magnetic devices have been optimized for different AxyPrep Mag protocols. These magnets address different volumes for tubes and plate types.



Protocol	Tube Description	Tube Material	Part Number
MagBead Kit	0.5ml Self Standing Screw Cap Tube	Polypropylene	RX-IMAG-12T
	1.5ml Self Standing Screw Cap Tube	Polypropylene	
	2.0ml Self Standing Screw Cap Tube	Polypropylene	

Contact Your Phenix Account Manager For Recommended Screw Cap Tube Ordering Info -- 800.767.0665.



Protocol	Plate Description	Plate Material	Part Number
MagBead PCR Clean Up MagBead Fragement Selection - I MagBead Fragement Selection - R MagBead DyeClean MagBead DNA Quantification	96 Flat 360ul	Polypropylene	RX-IMAG-96P
	96 Flat Bottom	Polystyrene	
	96 Round 360ul	Polypropylene	
	96 Clear Pro Round	Polypropylene	
	96 Round Bottom	Polystyrene	
	96 V-Bottom 0.5ml	Polypropylene	
	96 PCR Full Skirt	Polypropylene	
	96 PCR Half Skirt	Polypropylene	

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Protocol	PlateDescription	Tube Material	Part Number
MagBead Blood gDNA MagBead FFPE (DNA/RNA/miRNA) MagBead Plasmid Kit MagBead Tissue gDNA	96 Round Bottom 1ml	Polypropylene	RX-IMAG-96RD
	96 Round Bottom 2ml		

Contact Your Phenix Account Manager For Recommended Deep Well Plate Ordering Info -- 800.767.0665.