User Guide









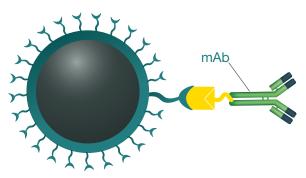
Before using bioZen™ MagBeads:

- 1 Ensure there is no leaks in the packaging upon arrival.
- Store at 2-8 °C for up to 12 months from date of receiving.
- 3 Low protein-binding labware is recommended to ensure optimal performance.

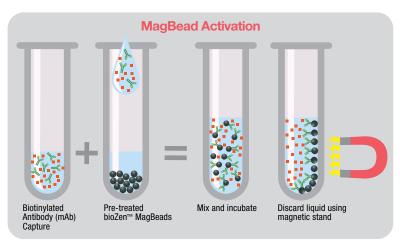
bioZen MagBeads Streptavidin Coated

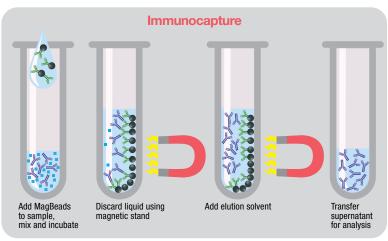
bioZen MagBeads are used for the purification, clean-up, and isolation of proteins and peptide molecules using a paramagnetic affinity bead with a streptavidin coated surface. Magnetic beads offer a rapid solution compared to traditional sample preparation options by maximizing high capacity binding with a uniform particle for accurate and reliable results.

Product Specifications							
Product	Coating	Formats	Part No.	Concentration	Bead Size		
bioZen MagBeads	Streptavidin	25 mg (≈50 samples) 50 mg (≈100 samples) 500 mg (≈1000 samples)	KS0-9531 KS0-9532 KS0-9533	20 mg/mL	0.95-1.15 µm		



Streptavidin MagBead Particles





MagBead Workflow

Prepare necessary reagents to specifications prior to starting experiment. This protocol is recommended but can be adjusted based on extraction requirements. Refer to section "Reagents and Requirements" for what additional reagents and labware is needed.

PLEASE NOTE: Protocol is written for low protein binding 2 mL 96-Well Collection Plate (Phenomenex Part No.: AH1-7036). Other 96-well collection plates or tubes may be used to perform the protocol.

MagBead Activation

- Transfer the necessary amount of bioZen™ MagBeads slurry into a low protein binding collection plate or tube. (General Recommendation: use 500 µg of MagBeads per sample)
- Record the bead slurry volumes to add the corresponding amounts of biotinylated antibody. (Typical binding capacity of 1 mg of MagBeads is 20 µg of biotinylated antibody.)
- 3. Place the plate or tube on a magnetic stand for 30 seconds and discard excess liquid.
- Resuspend the MagBeads with 500 μL Phosphate Buffered Saline (PBS) buffer, mix using a vortex or pipette.
- Place the plate or tube on a magnetic stand for 30 seconds and discard excess liquid. Repeat wash and discard steps 2x more.
- Reconstitute MagBeads with PBS to the original slurry volume from step 1
 (If starting with 500 μL of slurry mixture, add 500 μL of buffer during this step).
- 7. Add an appropriate amount of biotinylated antibody based on original bead slurry volume.
- Incubate for 1 hour at room temperature on a thermoshaker at 1200 RPM to ensure MagBeads stay suspended in solution.
- 9. Place the plate or tube on a magnetic stand for 30 seconds and discard excess liquid.
- Add 500 µL PBS buffer and mix the bead slurry well until the bead pellet is completely suspended using a vortex or pipette.
- 11. Place the plate or tube on a magnetic stand for 30 seconds and discard excess liquid. Repeat wash and discard steps 2x more.
- 12. Reconstitute MagBeads with PBS buffer to the original slurry volume from step 1 (If starting with 500 μL of slurry mixture, add 500 μL of buffer).
- 13. The bioZen MagBeads are now ready to use.

Protocol Steps

Immunocapture

- Add samples (double blank, blanks, unknowns, QCs, etc.) to separate wells of a 96-well plate (Phenomenex Part No.: AH1-7036).
- 2. Vortex activated bioZen™ MagBeads slurry (from step 13 of activation) thoroughly and aliquot 25 μL into each individual well containing samples.
- 3. Cover the plate with polyester sealing tape (*Phenomenex Part No.: AH0-7362*).
- 4. Vortex until the slurry is well mixed.
- 5. Incubate for a minimum of 2 hours (or allocated amount) at room temperature with shaking speed of 1200 RPM on a thermoshaker.
- Place the plate or tube on a magnetic stand for 30 seconds and discard excess liquid.

Washing and Elution

- Add 200 µL PBS buffer, cover with sealing tape, vortex to mix, and centrifuge at 800 RPM for 3 seconds.
- Place the plate or tube on a magnetic stand for 2 minutes and discard excess liquid. Repeat wash and discard 1x.
- Add 200 µL of 10 mM Ammonium bicarbonate, cover with sealing tape, vortex to mix and centrifuge at 800 RPM for 3 seconds.
- 10. Place the plate or tube on a magnetic stand for 2 minutes and discard excess liquid.
- 11. Add 100 µL elution buffer (0.1 % Trifluoroacetic acid in Water) and mix using a vortex or pipette. If applicable, ensure the pH is correct and cover with polyester sealing tape and shake the plate or tube at 1200 RPM for 10 minutes using a deep well thermoshaker.
- 12. Centrifuge at 800 RPM for 3 seconds.
- 13. Place the plate on a magnetic stand for 10 minutes. DO NOT DISCARD THE LIQUID.
- 14. Transfer the supernatant to a new Phenomenex 96-well collection plate and place the plate on a magnetic stand for 10 minutes to clean up residual beads.
- Transfer the supernatant to a Phenomenex new 96-well collection plate for further processing.

Reagents and Requirements

- **Pipette**
- Buffer (such as PBS)
- Antibody
- Standards
- 96 magnetic separation device
- 96-Well Collection Plate, low protein binding (*Phenomenex Part No.: AH1-7036*)
- Sealing Tape (*Phenomenex Part No.: AH0-7362*)
- Deep Well Plate Thermoshaker
- Verex[™] Vials

Ensure Protein Recovery with Biocompatible Accessories!





Phenex Syringe Filters

PES membranes offer fast-flow and ultra-low protein binding www.phenomenex.com/SFfinder



Verex Vials, Caps, and Kits

Wide-range of certified vial and cap products to ensure precision www.phenomenex.com/VialFinder



Ordering Information

Find a bioZen LC Column for your analysis

bioZen Columns (mm)				Biocompatible Guard Cartridges	
	50 x 2.1	100 x 2.1	150 x 2.1	for 2.1 mm	Holder
				/3pk	ea
bioZen 1.6 µm Peptide PS-C18	00B-4770-AN	00D-4770-AN	00F-4770-AN	AJ0-9803	AJ0-9000
				/10pk	ea
bioZen 3 µm Peptide PS-C18	00B-4771-AN	_	00F-4771-AN	AJ0-7605	KJ0-4282
				/3pk	ea
bioZen 1.7 µm Peptide XB-C18	00B-4774-AN	00D-4774-AN	00F-4774-AN	AJ0-9806	AJ0-9000
				/3pk	ea
bioZen 2.6 µm Peptide XB-C18	00B-4768-AN	00D-4768-AN	00F-4768-AN	AJ0-9806	AJ0-9000

For additional bioZen LC Part Numbers, go online: www.phenomenex.com/biozen

bioZen MagBeads						
Coating	Formats	Part No.				
Streptavidin	25 mg (1.25 mL) 50 mg (2.50 mL) 500 mg (25 mL)	KS0-9531 KS0-9532 KS0-9533				





If you still have questions or need help with set-up, live chat with a technical expert

www.phenomenex.com/livechat

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