

Isolate Proteins and Peptides in

# Less Time with Higher Response

Introducing bioZen MagBeads:

Streptavidin Coated Paramagnetic Beads









is designed for your lab, but for the whole self; mind, body, soul, and lab.

# We've been busy.

From the minds of protein chemists, chromatographers, and mass spec gurus, we've forged something new.

A comprehensive blend of innovative and acclaimed separation materials?

A product QC testing program to reflect customer applications?

A team of savvy protein and separation scientists to back your endeavors?

A promise to drive successful bioseparations and fulfill the needs of our customers worldwide?

We have so much more to offer you.

Find your sample preparation state of Zen.



# Uniform and Reliable Magnetic Beads

With a unique magnetic bead particle and rigorous specifications, bioZen MagBeads are created to ensure accurate binding of targets proteins. Uniform beads make it easier than ever to ensure consistency and reliability.



# bioZen MagBeads

- Ideal for binding biotinylated capture antibodies
- 1.0 µm streptavidin coated magnetic beads
- Available in 25 mg, 50 mg, and 500 mg formats

## **Specifications**

Bead Type: Iron coated Bead Diameter: 1 µm Outside Coating Type: Streptavidin

**Biotin Binding Capacity:** > 200 pmol Biotin/mg

Coating Specification: Tosyl-Activated, blocked with hydrophilic copolyment

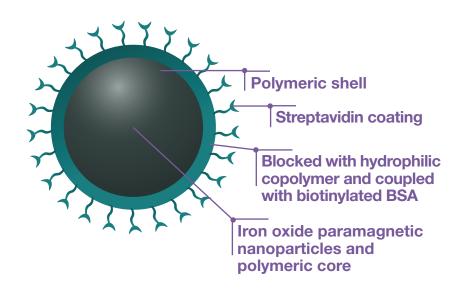
Concentration: 20 mg/mL

Available Formats: 25 mg, 50 mg, 500 mg

# Non-saturated, accurate binding surface orientation

Blocked with copolymer and hydrophilic coupled with biotinylated BSA which:

- Properly orients capture antibody
- Prevents surface crowding and ligand inactivation through non-specific binding
- Enhances dispersion of particles
- Improves binding efficiency



# **Uniform Particles**

bioZen MagBeads offer smooth, even 1.0 µm paramagnetic particles providing an ideal surface for the streptavidin coating and making your purification steps even more effective!

Consistent and uniform beads make it easier than ever to automate your workflow and increase binding capacity to increase reactivity.



## Uneven beads will cause:

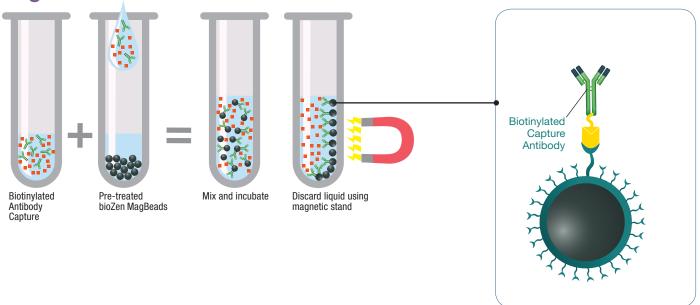
- Unpredictable results
- Variable binding capacity
- Inconsistent methods

# Advanced Particle Platform

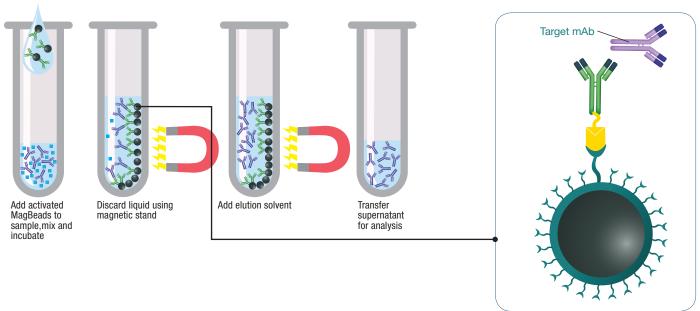
bioZen MagBeads are used for the purification, clean-up, and isolation of proteins and peptide molecules using a paramagnetic affinity bead with a streptavidin coated surface. Magnetic beads offer a rapid solution compared to traditional sample preparation options by maximizing high capacity binding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



# **MagBead Activation**



# **Immunocapture**



Learn how to use bioZen MagBeads at www.phenomenex.com/bioZenSP

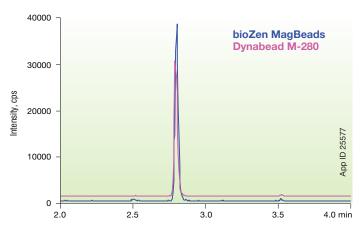
# High Recoveries and Exceptional Consistency

In order to properly analyze specific Rituximab signature peptides from rat plasma, Rituximab must be targeted and isolated prior to digestion and analysis. To help achieve the desired assay linear dynamic range, bioZen MagBeads were utilized and compared with Thermo Fisher® Dynabeads™ magnetic beads. bioZen MagBeads display high sensitivity and reproducibility with low variation between samples and batches to be a guaranteed replacement in current immunocapture methods.



# Rituximab Signature Peptide - ASGYTFTSYNMHWVK

Comparison of Dynabeads M-280 vs. bioZen MagBeads



bioZen MagBeads offer improved recovery and provides greater accuracy for the peptide quantitation.

Column: bioZen  $3\,\mu m$  Peptide PS-C18 Dimension:  $50 \times 2.1 \,mm$ 

Part No.: 00B-4771-AN

Mobile Phase: A: 0.1 % Formic acid in Water

R: 0.1 % Formic acid in Acetonitrill

B: 0.1 % Formic acid in Acetonitrile Gradient: 3-50 % in 4.5 minutes

Flow Rate: 0.3 mL/min Temperature: 40 °C

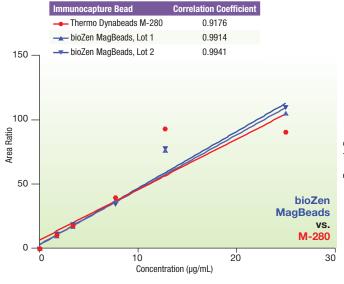
**Detection:** SCIEX X500B Q-T0F

 $\textbf{Sample:} \ \, \text{Rituximab 1.5} \, \mu\text{g/mL (ASGYTFTSYNMHWVK)}$ 

# bioZen MagBeads Binding Activity Leads to Accurate and Sensitive Results

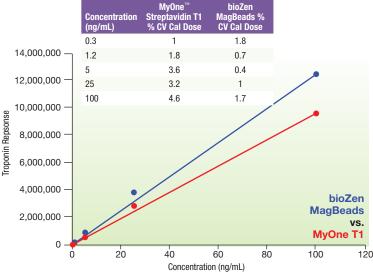
## Rituximab

- · Reduction in non-specific binding
- · Excellent reproducibility lot-to-lot



## **Troponin**

- Increased assay precision
- Improvements in response



Comparative separations may not be representative of all applications.

# Ordering Information



bioZen Products - Powered by Biocompatible Hardware

bioZen Columns (mm)				Biocompatible Guard Cartridges				
	50 x 2.1	100 x 2.1	150 x 2.1	50 x 4.6	150 x 4.6	for 2.1 mm	for 4.6 mm	Holder
						3/pk	_	ea
bioZen 2.6 µm Glycan	_	00D-4773-AN	00F-4773-AN	_	_	AJ0-9800	_	AJ0-9000
						3/pk	_	ea
bioZen 1.6 µm Peptide PS-C18	00B-4770-AN	00D-4770-AN	00F-4770-AN	_	_	AJ0-9803	_	AJ0-9000
						10/pk	10/pk	ea
bioZen 3 µm Peptide PS-C18	00B-4771-AN	_	00F-4771-AN	00B-4771-E0	00F-4771-E0	AJ0-7605	AJ0-7606	KJ0-4282
						3/pk	_	ea
bioZen 1.7 µm Peptide XB-C18	00B-4774-AN	00D-4774-AN	00F-4774-AN	_	_	AJ0-9806	_	AJ0-9000
						3/pk	3/pk	ea
bioZen 2.6 µm Peptide XB-C18	00B-4768-AN	00D-4768-AN	00F-4768-AN	00B-4768-E0	00F-4768-E0	AJ0-9806	AJ0-9808	AJ0-9000
						3/pk	3/pk	ea
bioZen 3.6 µm Intact C4	00B-4767-AN	00D-4767-AN	00F-4767-AN	00B-4767-E0	00F-4767-E0	AJ0-9809	AJ0-9811	AJ0-9000
bioZen 3.6 µm Intact XB-C8	00B-4766-AN	00D-4766-AN	00F-4766-AN	00B-4766-E0	00F-4766-E0	AJ0-9812	AJ0-9814	AJ0-9000

	50 x 2.1	100 x 2.1	150 x 2.1	250 x 2.1	50 x 4.6	100 x 4.6	150 x 4.6	250 x 4.6	300 x 4.6	for 4.6 mm	Holder
										/3pk	ea
bioZen 1.8 µm SEC-2	00B-4769-AN	_	00F-4769-AN	_	_	_	00F-4769-E0	_	00H-4769-E0	AJ0-9850	AJ0-9000
bioZen 1.8 µm SEC-3	00B-4772-AN	_	00F-4772-AN	_	_	00D-4772-E0	00F-4772-E0	_	00H-4772-E0	AJ0-9851	AJ0-9000
										for 4.6 mm	Holder
										/10pk	ea
bioZen 6 µm WCX	00B-4777-AN	00D-4777-AN	00F-4777-AN	00G-4777-AN	00B-4777-E0	00D-4777-E0	00F-4777-E0	00G-4777-E0	_	AJ0-9400	KJ0-4282

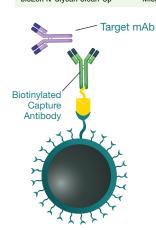
# Recommended LC Phase for Use with bioZen MagBeads



bioZen Peptide PS-C18	bioZen Peptide XB-C18
Fully porous, thermally modified with positively charged surface	Core-shell particle with sterically hindered C18
Improved peak shape under formic acid conditions especially for later eluting peptides	Improved retention of hydrophilic peptides and orthogonal selectivity to traditional C18
1.6 µm and 3 µm	1.7 µm and 2.6 µm

## bioZen N-Glycan Clean-Up

Solid Phase Extraction	Format	Sorbent Mass	Part Number	Unit	Price
hioZen N-Glycan Clean-Un	Microelution 96-Well Plate	5 mg/well	8M-S009-NGA	1/hox	



## bioZen MagBeads Streptavidin

Formats	Part No.	Price	Concentration	Bead Size
25 mg (≈50 samples)	KS0-9531		20 mg/mL	1.0 µm
50 mg (≈100 samples)	KS0-9532			
500 mg (≈1000 samples)	KS0-9533			





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www.phenomenex.com/behappy

# Ensure Protein Recovery

with Biocompatible Accessories!





# Phenex Syringe Filters

PES membranes offer fast-flow and ultra-low protein binding. Also available in a wide range of membranes!

www.phenomenex.com/SFfinder

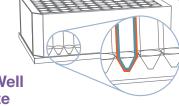


# **Verex Vials, Caps, and Kits**

Wide-range of certified vial and cap products to ensure precision and reduction in possible interferences.

www.phenomenex.com/VialFinder





# Low-Bind 96-Well Collection Plate

Utilizing glass-lined low-bind 96-well collection plates saves your recovery and sensitivity for your analysis. Available in 120/pk for a high throughput option!

www.phenomenex.com/collection



**Isolate Proteins** and Peptides in

# MagBeads

# ess Time with

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