

## **BeaverBeads**<sup>TM</sup>

# BeaverBeads<sup>™</sup> Streptavidin

Currently, there are 5 BeaverBeads<sup>TM</sup>streptavidin products available. Researchers should make a choice based on the samples and targets of experiments. Buffer and solution systems also make a difference.

### **Product Information**

Product name	Binding capacities	Properties	Applications
22306	•800 pmol free biotin/mg beads	5µm diameter	Immunoassay, Cell activation
	•15 μg biotinylated IgG/mg beads	Polymer matrix	
	•400 pmol biotinylated ss oligonucleotide(24nt)/mg beads	Hydrophilic bead surface	
22307	•1100 pmol free biotin/mg beads	1 μm diameter	
	•20 μg biotinylated IgG/mg beads	Polymer matrix	Immunoassay, Nucleic acid probe capture,
	•500 pmol biotinylated ss oligonucleotide(24nt)/mg beads	Hydrophilic bead surface	
22308	<ul> <li>•15 μg biotinylated IgG/mg beads</li> <li>•450 pmol biotinylated ss oligonucleotide(24nt)/mg beads</li> </ul>	300 nm diameter	Chemiluminescence,
		Polymer matrix	Cell isolation
		Hydrophilic bead surface	
22309	<ul> <li>•15 μg biotinylated IgG/mg beads</li> <li>•450 pmol biotinylated ss oligonucleotide(24nt)/mg beads</li> </ul>	2.8 µm diameter	Immunoassay, Chemiluminescence
		Polymer matrix	
		Hydrophilic bead surface	
22321	•4 mg biotinylated IgG/mL gel	10-30 µm diameter	Purification of biophatmacy samples
		Agarose matrix	
		Hydrophilic bead surface	

## Applications

Legend	Application direction	Sketch	
	Immunoassay,	BeaverBeads <sup>™</sup> Streptavidin can specifically bind	
	Separation of protein,	biotinylated antibody or antigen, as immune detection, ELISA solid-phase reaction carrier, or used for sorting	
	cell sorting, etc.	cells	
20.00.05	Isolated nucleic acid,	BeaverBeads <sup>™</sup> Streptavidin can specifically combine	
	Preparation of Nucleic acid probes	biological nucleic acid probe in the hybridization experiments that widely used in DNA, RNA.	
	DNA-Study on protein	BeaverBeads <sup>™</sup> Streptavidin specifically targets with	
(	Interaction protein	biotinylated DNA or RNA fragments can be used to study the interaction between proteins and nucleic.	
	interaction protein	acids.	

## **Rapid binding with biotinylated targets**

- Dispersion medium with no need of centrifugation, precipitation, or columns
- · Fast reaction kinetics and strong binding affinity
- · Consistent physical and chemical properties
- Automated isolation of biotinylated biomolecules

### Simple Operation

Experiments with magnetic beads can be way simpler than those with traditional columns. Complicated and tiring centrifugation and filtration steps are unnecessary in this matter. Magnetic beads method makes the separation of targets and impurities easier and the automated process possible.

## High sensitivity and low background signal

BeaverBeads<sup>™</sup> Streptavidin products have high streptavidin content and thus are able to combine with large amounts of biotinylated molecules. In addition, 2-step blocking is applied to ensure the minimum sites for non-specific adsorption on the bead surface.

### Rapid reactions and outstanding specificity

The combination of streptavidin on the magnetic beads and biotinylated targets can be very stable since the association constant is 10^15. In addition, the in-solution reaction shows high kinetics as well. BeaverBeads<sup>™</sup> appears perfect sphere shape under SEM and has large specific area. These characteristics lead to high binding capacity of the beads.

### **Reproducible results**

Attention is always paid to important parameters including bead size distribution, specific area, magnetism, binding capacity, and nonspecific adsorption. In order to ensure the stable performance, washing steps are essential to remove the physically-adsorbed streptavidin. Thus the variations between each batch are decreased.

### Product List

Cat.No.	Product Name	Size
22306-1		1 mL, 10 mg/mL, 300 nm
22306-10		10 mL, 10 mg/mL, 300 nm
22306-100		100 mL, 10 mg/mL, 300 nm
22307-1		1 mL, 10 mg/mL, 1 μm
22307-10		10 mL, 10 mg/mL, 1 μm
22307-100	BeaverBeads <sup>™</sup> Streptavidin	100 mL, 10 mg/mL, 1 μm
22308-1		1 mL, 10 mg/mL, 300 nm
22308-10		10 mL, 10 mg/mL, 300 nm
22308-100		100 mL, 10 mg/mL, 300 nm
22309-1		1 mL, 10 mg/mL, 2.8 μm
22309-10		10 mL, 10 mg/mL, 2.8 μm
22309-100		100 mL, 10 mg/mL, 2.8 μm
22321-5		5 mL, 20% (v/v), 10-30 μm
22321-10		10 mL, 20% (v/v), 10-30 μm
22321-50		50 mL, 20% (v/v), 10-30 μm



Focus on International Official Website

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Agent information