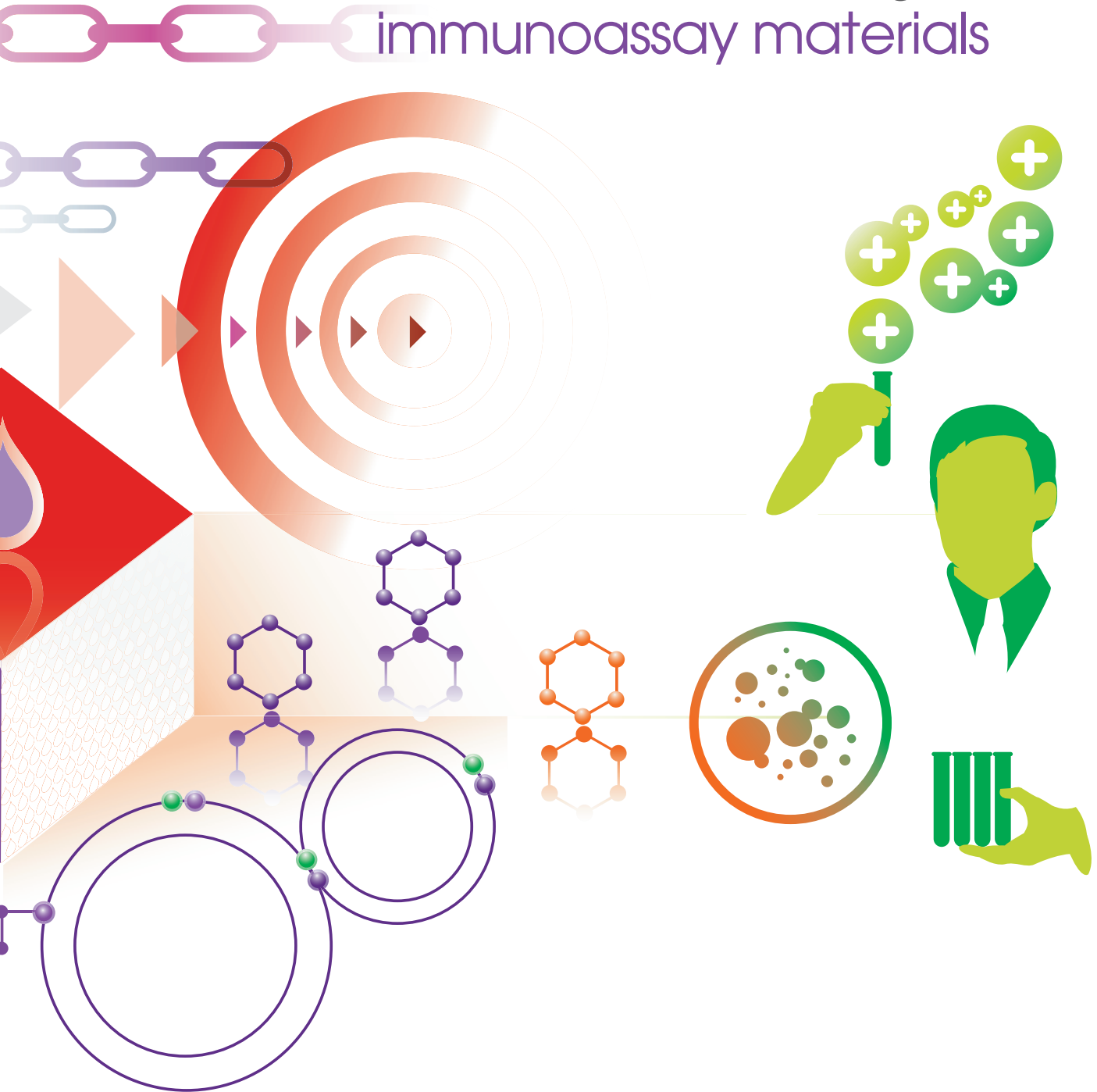


Develop robust and highly sensitive assays using Sekisui immunoassay materials



**SEKISUI**  
DIAGNOSTICS

*Because every result matters™*

Whatever your immunoassay needs, our Streptavidin and Alkaline Phosphatase are the most appropriate for a wide range of immunoassay applications.

# Sekisui Immunoassay



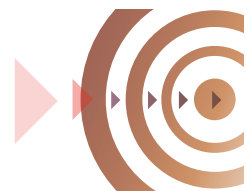
## Smartbond Streptavidin

- Core streptavidin, a proven molecule with the highest binding affinity towards biotin
- Enhanced manufacturing process optimised to make homogeneous core streptavidin
- High activity  $\geq 16$  U/mg
- High specific activity providing greater binding capacity to biotin per mg of protein
- Predominantly single band by isoelectric focusing (IEF)
- Minimal protease and nuclease contamination
- Best product in the market for latex agglutination and magnetic bead-based immunoassay applications



## Smartbond Alkaline Phosphatase

- Recombinant highly active product
- Highest activity available on the market
- An alternative to conventional alkaline phosphatase products made from bovine intestine
- Can be used with commonly used substrates including pNPP, BCIP, MUP, and CSPD
- Effective conjugation via its accessible amino groups; does not contain carbohydrate groups



Immunoassay employs a combination of labelling agents for the detection of antibodies and antigens. Sekisui Diagnostics has developed specialised streptavidin for the enhancement of signal generation and highly-active recombinant alkaline phosphatase as labelling enzyme.

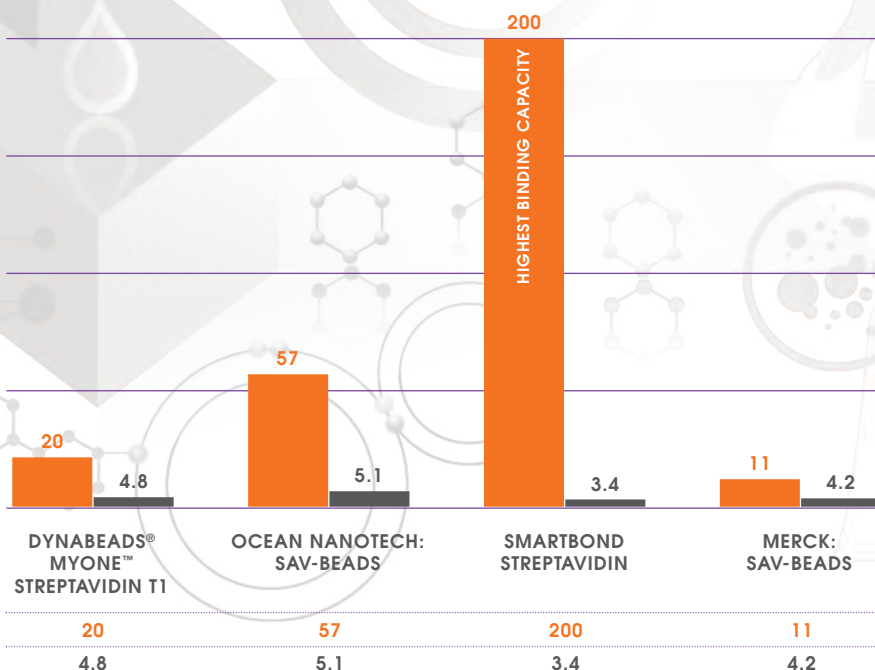
# Immunoassay Raw Materials

## Smartbond Streptavidin Magnetic Beads

Smartbond Streptavidin is covalently coupled to the paramagnetic bead via proprietary linkers. The proprietary conjugation chemistry employed produces beads that possess highest biotin binding capacity in the market, optimized and validated for use with high-throughput random access magnetic platform analysers in the application of immunodiagnostics.

- Highest biotin binding; outperforms competitors on free-biotin binding capacity
- Requires less volume than the competition (2.5 times lower) concentration to perform similar assays which is a cost effective solution for developing automated assays
- Negligible non-specific binding
- Compatible with broad pH and temperature ranges
- Uniform size and lot-to-lot reproducibility

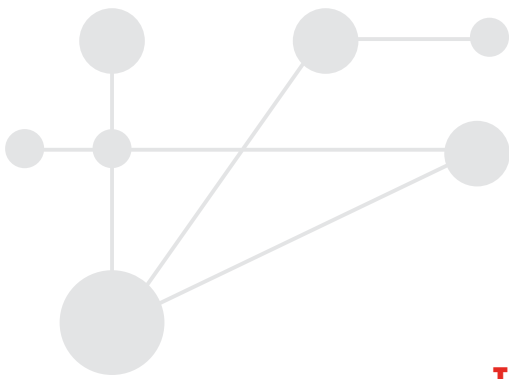
### BIOTIN BINDING CAPACITY AND NON-SPECIFIC BINDING (NSB) TESTS



All four-streptavidin coated magnetic beads brands (1µm) were incubated for 1 hour with biotin-IgG or IgG (control) at a ratio of 10µl beads to 20 µg Biotin-IgG or 20 µg IgG. The binding capacity and non-specific binding were determined.



BINDING CAPACITY PER 1mg BEADS—BIOTIN IgG (µG)  
NON-SPECIFIC BINDING PER 1mg BEADS—IgG (µG)



## THE SEKISUI ADVANTAGE

### Buy your raw materials for immunodiagnostics from a diagnostics company

Sekisui Diagnostics understands the demands of IVD companies because we are a diagnostics IVD company and our enzymes business has been supporting the major players of the global IVD industry for decades. We are now bringing our experience of the IVD industry into a focused portfolio of enzymes and ancillary materials specifically targeted for IVD applications. This is supported by our expertise in manufacturing, along with fully integrated research and development, quality and engineering, and a long-established enzymes supply chain.



#### PRODUCT ORDERING INFORMATION

PRODUCT	FORMAT	CODE
Smartbond Streptavidin	1 mg	STRE-70-4803-01
	5 mg	STRE-70-4803-05
	20 mg	STRE-70-4803-20
	100 mg	STRE-70-4803-100
	Bulk (in grams)	STRE-70-4803
Smartbond Alkaline Phosphatase	15 mg	ALKP-70-6471-15
	500 mg (bulk )	ALKP-70-6471
Horseradish Peroxidase RZ 3.0	Bulk (KU)	PERO-70-6925
Smartbond Streptavidin Magnetic Beads	1 mL (4mg)	SMB-70-4903-01
	5mL (20mg)	SMB-70-4903-05
	Bulk (in grams)	SMB-70-4903

#### THE AMERICAS

Sekisui Diagnostics, LLC  
One Wall Street  
Burlington, MA 01803  
Phone: 800 332 1042  
Fax: 800 762 6311

[engage@sekisuienzymes.com](mailto:engage@sekisuienzymes.com)

#### INTERNATIONAL

Sekisui Diagnostics (UK) Limited  
Liphook Way, Allington  
Maidstone, Kent, ME16 0LQ, UK  
Phone: +44 1622 607800  
Fax: +44 1622 607801

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