**CUSTOMBIOTECH** 



### Streptavidin/Biotin System

for the Diagnostics Industry



## Benefit from the pioneers' expertise

#### Streptavidin/Biotin applications

Streptavidin is a core component of countless immunoassays to label or immobilize analytes. Recombinant Streptavidin is a suitable tool for enabling universal test systems in immunology and molecular diagnostics. Stringent quality control processes ensure high biotin affinity and robustness to pH variation, detergents, and ionic strength. In addition, streptavidin-biotin's low nonspecific interactions improve signal-to-noise ratio.

#### Solid phase technology

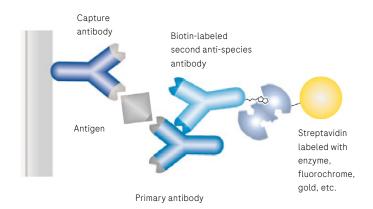
Streptavidin-coated solid phase

Recombinant Streptavidin is suited for coating solid phases, such as microplates, beads, and microarrays.

# Oligonucleotide-biotin conjugate Antibody-biotin conjugate Antigen-biotin conjugate Peptide-biotin conjugate

#### Universal detection systems

Due to its universal concept, the streptavidin/biotin system can be applied to various detection systems, including macroscopy, electron, light, and fluorescence microscopy, cytofluorography, and photometry



#### Roche sets industry standards with recombinant streptavidin

Roche CustomBiotech pioneered the development of recombinant streptavidin and is now one of the world's largest manufacturer of this protein. We continue to set industry standards through meaningful product innovation. For example, Streptavidin Mutein Sepharose includes a targeted mutation that makes streptavidinbiotin binding reversible, enabling purification of biotinylated compounds with high recovery and purity.

#### Recombinant Streptavidin from Streptomyces avidinii, expressed in E. coli:

- High biotin-binding capacity (≥ 17 U / mg protein)
- Protease-free (≤ 0.001 U / mg)

#### Streptavidin Mutein Sepharose

The Sepharose matrix provides a recombinant Streptavidin Mutein with reduced binding affinity to biotin immobilized onto cross-linked agarose beads in a highly stable form.

	Streptavidin, recombinant
Catalog number	08 903 727 103
Molecular weight	≥52.000
Biotin binding capacity	Streptavidin + 4 biotin streptavidin (biotin) <sub>4</sub> The formation of the complex is measured at 233 nm
pH stability	5.0 - 9.0
Working solution	10 mg lyophilizate / ml water
K <sub>D</sub>	10 <sup>-15</sup> mol / l

#### Interference elimination of antibodies to Streptavidin

As a specific blocker for antibody-based Streptavidin directed interferences derived from patient sera, the Streptavidin rec. inactive, poly can be easily integrated into your immunoassay reagents. Test accuracy and overall kit performance are improved.

Product	Catalog number
Streptavidin rec. inactive, poly	11922122103

#### **Regulatory Disclaimer**

For further processing only.

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