

## PrimeGene Technical Data Sheet

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<b>Catalog Number:</b>	1005-01L
<b>Source:</b>	Recombinant streptavidin from <i>Streptomyces avidinii</i> , produced in <i>Escherichia coli</i> .
<b>Molecular Weight:</b>	~52,000 per tetramer.
<b>Quantity:</b>	10mg/100mg
<b>Concentration:</b>	See label.
<b>AA Sequence:</b>	MAEAGITGTW YNQLGSTFIV TAGADGALTG TYESAVGNAE SRYVLTGRYD SAPATDGSGT ALGWTVAWKN NYRNAHSATT WSGQYVGGAE ARINTQWLLT SGTTEANAWK STLVGHDFTFT KVKPSAAS
<b>A<sub>282</sub> of 0.1% solution:</b>	3.1
<b>Purity:</b>	> 98 % by SDS-PAGE and HPLC analyses
<b>Specific Activity:</b>	> 17 U/mg (one unit binds 1 µg D-biotin)
<b>Physical Appearance:</b>	Sterile Colorless liquid.
<b>Formulation:</b>	Supplied as a 0.2 µm filtered concentrated sterile solution in 20 mM potassium dihydrogen phosphate buffer, pH 6.5.
<b>Endotoxin:</b>	Less than 0.1 EU/µg of rStreptavidin as determined by LAL method.
<b>Proteolytic Activity:</b>	< 10 <sup>-3</sup> U/mg protein (Azocoll, 25 °C, 24 h, pH 8.0)
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● Refer to lot specific COA for the Use by Date when stored at ≤ -20 °C as supplied.</li><li>● 12 months, -20 to -70 °C under sterile conditions after opening.</li></ul>
<b>Usage:</b>	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

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### ***Streptavidin***

Streptavidin is a tetrameric protein composed of identical subunits. Each subunit binds one biotin molecule with a KD of  $\sim 1 \times 10^{-15}$  M. The preparation contains an N- and C-terminal shortened variant (core streptavidin) with improved properties concerning homogeneity, solubility, resistance towards proteolytic degradation and accessibility of the biotin binding pocket as compared to native streptavidin.