

## 32-4990: Recombinant Streptavidin, His Tag

### Description

Source : Escherichia Coli. Recombinant Streptomyces Avidinii Streptavidin produced in E.Coli is a single, non-glycosylated polypeptide chain (25-183) containing a total of 167 amino acids and having a molecular mass of 17kDa. The Streptavidin protein is fused to an 8 aa N-terminal His-Tag and purified by proprietary chromatographic techniques. Streptavidin is a tetrameric protein secreted by Streptomyces avidinii which binds firmly to biotin. Streptavidin is widely used in molecular biology through its unique high affinity for the vitamin biotin. The dissociation constant (Kd) of the biotin-streptavidin complex is about ~10-15 mol/L. The strong affinity recognition of biotin and biotinylated molecules has made streptavidin one of the most important components in diagnostics and laboratory kits. The streptavidin/biotin system has one of the biggest free energies of association of yet observed for noncovalent binding of a protein and small ligand in aqueous solution ( $K_{\text{assoc}} = 10^{14}$ ). The complexes are also extremely stable over a wide range of temperature and pH.

### Product Info

<b>Amount :</b>	20 µg
<b>Purification :</b>	Greater than 95.0% as determined by analysis by SDS-PAGE.
<b>Content :</b>	The Streptavidin protein solution contains 20mM Tris-HCl pH7.5.
<b>Storage condition :</b>	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
<b>Amino Acid :</b>	MVHHHHHDP SKDSKAQVSA AEAGITGTWY NQLGSTFIVT AGADGALTGT YESAVGNAES RYVLTGRYDS APATDGSSTA LGWTVAWKNN YRNAHSATTW SGQYVGGAEA RINTQWLLTS GTTEANAWKS TLVGHDTFTK VKPSAASIDA AKKAGVNNGN PLDAVQQ.

