

## 32-4991: Recombinant Streptavidin (37-159 a.a), His Tag

### Description

Source : E.coli. Streptavidin Recombinant produced in E. coli is a single polypeptide chain containing 148 amino acids (37-159) and having a molecular mass of 15.6kDa. Streptavidin is fused to a 25 amino acid His-tag at N-terminus & 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  $\sim 10^{-15}$  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 $\mu$ g
<b>Purification :</b>	Greater than 90% as determined by SDS-PAGE.
<b>Content :</b>	The Streptavidin solution (0.25mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.15M NaCl and 20% glycerol.
<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>	MGSSHHHHHH SSSLVPRGSH MGSMAEAGI TGTWYNQLGS TFIVTAGADG ALTGTYESAV GNAESRYVLT GRYDSAPATD GSGTALGWTV AWKNNYRNAH SATTWSGQYV GGAEARINTQ WLLTSGTTEA NAWKSTLVGH DTFTKVKP.

