

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

Amount :	20 μ g
Purification :	Greater than 90% as determined by SDS-PAGE.
Content :	The Streptavidin solution (0.25mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.15M NaCl and 20% glycerol.
Storage condition :	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.
Amino Acid :	MGSSHHHHHH SSGLVPRGSH MGSHMAEAGI TGTWYNQLGS TFIVTAGADG ALTGTYESAV GNAESRYVLT GRYDSAPATD GSGTALGWTV AWKNNYRNAH SATTWSGQYV GGAEARINTQ WLLTSGTTEA NAWKSTLVGH DTFTKVKP.

