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Product Datasheet

Product Name Streptavidin Recombinant, His Tag

Cata No CB501478

Source *Escherichia Coli.*

Synonyms

Description
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_assoc = 10**14). The complexes are also extremely stable over a wide range of temperature and pH.
Streptavidin Streptomyces Avidinii Recombinant fused to N-terminal His-Tag produced in E.Coli is a single, non-glycosylated polypeptide chain containing 167 amino acids and having a molecular mass of 17 kDa.

Physical Appearance
Sterile Filtered colorless solution.

Purity
Greater than 95.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Formulation
The Streptavidin protein solution contains 20mM Tris-HCl pH7.5.

Stability
Streptavidin although stable 4°C for 4 weeks, should be stored desiccated below -18°C.
For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).
Please prevent freeze-thaw cycles.

Sequence
MVHHHHHHDP SKDSKAQVSA AEAGITGTWY NQLGSTFIVT AGADGALTGT YESAVGNAES RYVLTGRYDS APATDGSGTA LGWTVAWKNN YRNAHSATTW SGQYVGGAEA RINTQWLLTS GTTEANAWKS TLVGHDTFTK VKPSAASIDA AKKAGVNNGN PLDAVQQ.

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