www.neobiolab.com
info@neobiolab.com
888.754.5670, +1 617.500.7103 United States
0800.088.5164, +44 020.8123.1558 United Kingdom

Streptavidin, His

Catalog #:PRPS-628

For research use only.

Description: 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.

Source: Escherichia Coli.

Physical Appearance: Sterile Filtered colorless solution.

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

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:
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.

Usage:
NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drµgs, agricultural or pesticidal products, food additives or household chemicals.

Introduction:
Streptavidin is a tetrameric protein secreted by Streptomyces avidinii which binds firmly to biotin. Streptavidin is widely used in molecular biology throµgh 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.

References:
Title:Laterally mobile, functionalized self-assembled monolayers at the fluorous-aqueousinterface in a plµg based microfluidic system: characterization and testing withmembrane protein crystallization.Publication:Department of Chemistry, The University of Chicago,929 East 57th Street, Chicago, Illinois 60637E-mail: r-ismagilov@uchicago.eduLink:http://ismagilovlab.caltech.edu/publications/Ismagilov_JACS_2009_Mobile_Functional_SAMs_JEK_Supp_Info.pdf

To place an order, please Click HERE.