



Product Datasheet

Product Name Streptavidin-NC Recombinant
Cata No CB500959
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 (K_d) 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} = 10¹⁴). The complexes are also extremely stable over a wide range of temperature and pH. Recombinant Streptavidin-NC produced in *E.Coli* is a single, non-glycosylated, polypeptide chain having a molecular mass of 24kDa. Recombinant Streptavidin-NC not only binds to nitrocellulose membrane readily but also preserves the full biotin

binding ability.

Physical Appearance

Sterile Liquid formulation at the concentration.

Purity

Greater than 90.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The sterile solution contains 50% glycerol.

Stability

Streptavidin-NC although stable at 4°C for 3 weeks, should be stored below -18°C.

Please prevent freeze thaw cycles.

Applications

Calibrators and controls for immunoassays and western blot standards.