

Recombinant Streptavidin-NC

Catalog No.	CRS143A	Quantity:	20 µg
	CRS143B		100 µg
	CRS143C		1.0 mg

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 24 kDa. 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.

Source: *E. coli*

Molecular Mass: 24 kDa

Formulation: The sterile solution contains 50% glycerol.

Purity: Greater than 90.0% as determined by
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Storage & 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.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

