9051 Mira Mesa Blvd, #910094
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# Streptavidin Protein

*Streptavidin*
*RCP2275*

## Product Overview

| | |
|---|---|
| Name | Streptavidin Protein |
| **Description** | |
| Streptavidin | |
| Accession (Primary) | P22629 |

**Introduction**

Streptavidin is a tetrameric protein secreted by Streptomyces avidinii which binds firmly to biotin. Streptavidin is wilyde 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.

**Source**

Bacterium Streptomyces avidinii.

**Physical Appearance**

Sterile Filtered lyophilized powder.

**Formulation**

The Streptavidin was lyophilized from a 25mg/ml solution in 10 mM potassium phosphate buffer pH 6.5

**Stability**

Streptavidin although stable at 4°C for 3 weeks, should be stored desiccated below -18°C. For longer storage in dissolved form add 1mM EDTA and/or 0.02 % NaN3 or pass the solution through a sterile filter. Please prevent freeze-thaw cycles.

**Solubility**

Gives a clear solution at 10mg/ml in 4.0 mM potassium phosphate pH 6.5

**Specific Activity**

The biological activity is 16.8 U/mg, 1 unit binds 1 µg biotin.

**Precautions**

Streptavidin Protein is for research use only and not for use in diagnostic or therapeutic procedures.

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# Target Information: ( P22629 )