

# Streptavidin Antibody

*Streptavidin, Mouse Antibody*  
ABM0644

## Product Overview

Name Streptavidin Antibody

### Description

Streptavidin, Mouse Antibody

### Introduction

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<sub>d</sub>) of the biotin-streptavidin complex is about ~10<sup>-15</sup> 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<sub>assoc</sub> = 10<sup>14</sup>). 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 % NaN<sub>3</sub> 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 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

