9051 Mira Mesa Blvd, #910094
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Streptavidin

Streptavidin Recombinant
RCP2273

Product Overview

Name	Streptavidin
Description	
Streptavidin Recombinant	
Accession (Primary)	P22629
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 (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

Escherichia Coli.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

Lyophilized in 10mM potassium phosphate buffer pH 6.5.

Stability

Streptavidin is shipped at ambient temperature, upon arrival store at -20°C.

Purity

Greater than 98.0% as determined by SDS-PAGE and HPLC.

Amino acid sequence

MAEAGITGTWYNQLGSTFIVTAGADGALTGTYESAVGNAESRYVLT
GRYDSAPATDGSGTALGWTVAWKNNYRNAHSATTWSGQYVGGA
EARINTQWLLTSGTTEANAWKSTLVGHDTFTKVKPSAAS.

Solubility

It is recommended to reconstitute the lyophilized Streptavidin in sterile 18MΩ-cm H 2 O not less than 0.5mg/ml, which

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can then be further diluted to other aqueous solutions.

Specific Activity

> 17U/mg (one unit binds 1 µg D-biotin).

Proteolytic Activity

< 10 -3 U/mg protein (Azocoll, 25 °C, 24 h, pH 8.0).

Precautions

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

Target Information: (P22629)