

Avidin Protein

Avidin
NTP0009

Product Overview

Name Avidin Protein

Description

Avidin

Accession (Primary) [P02701](#)

Synonyms

Avidin, AVD, AVID.

Introduction

Avidin is a tetrameric protein of 4 identical subunits (homotetramer) which can bind to biotin with a high degree of affinity and specificity. The estimated molecular weight of Avidin in its tetrameric form is between 66-69 kDa. Avidin is produced in the oviducts of birds, reptiles and amphibians and is subsequently deposited in the whites of their eggs. In the chicken egg white, avidin makes up roughly 0.05% of total protein (approximately 1.8 mg per egg). 10% of Avidin's molecular weight is ascribed to carbohydrate content which is composed of 4-5 mannose and 3 N-acetylglucosamine residues. Avidin has at least three distinctive oligosaccharide structural type which are similar in structure and composition. The dissociation constant (KD) of avidin is approximately 10-15M, making it one of the strongest known non-covalent bonds.

Source

Corn (Zea Mays).

Physical Appearance

Sterile Filtered white lyophilized powder.

Stability

Lyophilized Recombinant Avidin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Recombinant Avidin should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

Greater than 90% as visualized by SDS-PAGE.

Biological Activity

13.5 units/mg protein, 1 unit binds 1 µg biotin.

Solubility

It is recommended to reconstitute the lyophilized Recombinant Avidin in sterile 18M Ω -cm H₂O not less than 100 μ g/ml or more than 10mg/ml solutions.

Precautions

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

Target Information: ([P02701](#))