

32-13042: Avidin Recombinant

Application : Functional Assay
Alternative Name : Avidin, AVD, AVID.

Description

Source: Corn (Zea Mays).

Sterile Filtered white lyophilized powder.

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.

Recombinant Avidin produced in Plants is a polypeptide chain having a molecular mass of 66kDa and 16kda per subunit. The Recombinant Avidin is purified by affinity chromatographic techniques.

Product Info

Amount : 5 mg / 25 mg

Purification : Greater than 90% as visualized by SDS-PAGE.

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

Storage condition : 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.

Application Note

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