

32-3274: Avidin Native Protein

Alternative Name : Avidin,AVD,AVID.

Description

Source : Hen's egg white. Avidin is a tetrameric protein of 4 identical subunits (homotetramer) each of which can bind to biotin with a high degree of affinity and specificity. Avidin molecular weight in its tetrameric form is estimated to be 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 four to five mannose and three 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.

Product Info

Amount : 25 mg

Storage condition : Lyophilized Avidin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution 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

It is recommended to reconstitute the lyophilized Avidin in sterile 18M Ω -cm H₂O not less than 100 μ g/ml or more than 10mg/ml solutions. 16 units/mg protein, 1 unit binds 1 μ g biotin.

