# Active Recombinant mushroom-Pleurotus cornucopiae avidin

**Cat. No.** avidin-5110m **Lot. No.** (See product label)

## SPECIFICATION

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| **Product Overview** | Mushroom avidin is a soluble recombinant thermo stable avidin which was produced in E.coli cells (derive from mushroom-Pleurotus cornucopiae) |
| **Species** | mushroom-Pleurotus cornucopiae |
| **Source** | E.coli |
| **Description** | Avidin, a tetrameric glycoprotein from egg white, binds biotin (vitamin H) with remarkably high affinity; Streptavidin, an avidin-like protein from Streptomyces avidinii, also binds biotin strongly; Mushroom avidin is derive from mushroom (Pleurotus cornucopiae), and is a fungal avidin-like protein that binds biotin with high affinity. A drawback specific to avidin is its high level of non-specific binding to various biological components at physiological pH. Mushroom avidin shows a remarkably high affinity for biotin, like avidin and streptavidin. Mushroom avidin is a tetrameric protein and each subunit binds biotin with high affinity. It has higher thermo stability than those of avidin and streptavidin, and shows less nonspecific binding than avidin. The isoelectric point of Mushroom avidin is 7.4, lower than avidin (10.0), and slightly higher than that of streptavidin (6.0-7.5). The Tm (temperature of half-life period of biotin binding activity after heat treatment) value of Mushroom avidin is 85℃, higher than avidin from egg (79℃) and streptavidin (74℃). The Mushroom avidin - biotin interaction is widely employed as a universal tool in numerous biotechnological applications. For example, like avidin, it can be applied for affinity chromatography, ELISA, immunohistochemistry and Western Blotting, an so on. |

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| **Predicted N Terminal** | Met 1 |
| **Form** | Lyophilized from 0.22 μm filtered solution in 50 mM NaAc, pH4.0. Normally Mannitol or Trehalose are added as protectants before lyophilization.Contact us for customized product format or formulation. |
| **Bio-activity** | One unit is defined as the amount of Mushroom avidin required to bind 1.0 μg biotin by HABA-Avidin method.5-20 units per mg protein supplied at 1 mg/ml. |
| **Molecular Mass** | 15.5 kDa. DTT-reduced Protein migrates as 15.5 kDa. |
| **Endotoxin** | Less than 1.0 EU per μg of the Mushroom avidin by the LAL method. |
| **Purity** | >95% as determined by SDS-PAGE. |
| **Storage** | Avoid repeated freeze-thaw cycles.No activity loss was observed after storage at:In lyophilized state for 1 year (4oC-8oC); After reconstitution under sterile conditions for 1 month (4oC-8oC) or 3 months (-20oC to -70oC). |

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