

MP Biomedicals, LLC

29525 Fountain Parkway Solon, Ohio 44139 Telephone: 440/337-1200 Toll Free: 800/854-0530 Fax: 440/337-1180 mailto: biotech@mpbio.com web: http://www.mpbio.com

TECHNICAL INFORMATION

Catalog Number: 100303, 150047, 150407 Avidin

CAS #: 1405-69-2

Physical Description: White lyophilized powder

Source: Chicken egg white

Description: Avidin is a basic glycoprotein isolated from raw egg white. It exhibits high binding affinity for biotin and is capable of producing biotin deficiency in rats and chicks. It also occurs in the white portion of eggs and the oviducts of birds and amphibia. It is destroyed by cooking or irradiation.

Structure: Glycoprotein consisting of four essentially identical subunits. The combined molecular weight of the subunits is about 66,000. Each subunit is a single polypeptide chain containing 128 amino acid residues with alanine at the N-terminal, glutamic acid at the C-terminal, and a carbohydrate moiety attached at the aspariginyl residue, position 17.

Unit Definition: One unit will bind 1 ug of D-biotin at pH 8.9.

Solubility: Soluble in water or dilute aqueous buffer.

Catalog Number	Description	Size
100303	Avidin, activity approximately 10 units/mg	100 U 1 KU
150047	Avidin, freeze dried, activity approximately 10-15 units/mg solid	5 mg 10 mg 25 mg 100 mg
150407	Avidin, affinity purified, activity approximately 10-15 units/mg protein	1 mg 5 mg 10 mg 25 mg 100 mg

References:

- Merck Index, 12th Ed., No 920
- Eakin et al., J. Biol. Chem. 136, 801 (1940)
- Pennington et al., J. Am. Chem. Soc. 64, 469 (1942)
- Fraenkel-Conrat et al., Arch. Biochem. Biophys. 39, 80, 97 (1952)
- Green et al., Biochem. J. 118, 67,71 (1970)
- Green, *ibid.* **92**, 16c (1964)
- DeLange, Huang, J. Biol. Chem. 246, 698 (1971)
- Becker, Wilchek, Biochem. Biophys. Acta 264, 165 (1972)
- N.M. Green, Advan. Protein Chem. 29, 85-133 (1975)
- E. A. Bayer, M. Wilchek, Methods Biochem. Anal. 26, 1-45 (1980)
- M. Wilchek, E.A. Bayer, Immunol. Today 5, 39-43 (1984)