

# Datasheet for ABIN964120 Avidin Protein (AVD) (HRP)

Image



#### Overview

Quantity:	2 mg
Target:	Avidin (AVD)
Origin:	Chicken egg
Host:	Please inquire
Purification tag / Conjugate:	This Avidin protein is labelled with HRP.
Application:	ELISA, Western Blotting (WB)

#### Product Details

Specificity:Avidin Peroxidase Conjugated was prepared from chromatographically pure avidin followed by<br/>extensive dialysis against the buffer stated above. Avidin Peroxidase Conjugated assayed by<br/>immunoelectrophoresis resulted in a single precipitin arc against anti-Avidin and anti-<br/>Peroxidase.

#### Target Details

Target:	Avidin (AVD)
Alternative Name:	Avidin (AVD Products)
Background:	Avidin is a biotin-binding protein found in the oviducts of egg-laying animals (birds, reptiles, and
	frogs) that gets deposited into the whites of their eggs. Avidin is a tetramer and can bind up to
	four biotin molecules (Vitamin B7) with one of the greatest known non-covalent interactions.
	Avidity for biotin is destroyed with heat. Horseradish Peroxidase (HRP) is an enzyme that
	utilizes organic peroxide compounds as electron donors. Horseradish Peroxidase naturally
	provides protection for plants against pathogens, but can be utilized in molecular biology to

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 1/3 | Product datasheet for ABIN964120 | 05/14/2025 | Copyright antibodies-online. All rights reserved. convert various substrates to detectable compounds (such as in Western Blotting and ELISAs). Avidin Peroxidase Conjugated is ideal for investigators in Immunology, Cancer, Neuroscience, and Cell Biology. Synonyms: HRP, Horseradish peroxidase, AvD, Avidin Biotin Complex

### Application Details

Application Notes:	Avidin Peroxidase Conjugated is a useful detection reagent for primary antibodies conjugated to biotin. Avidin Peroxidase Conjugated can be utilized in both Western Blotting and ELISA experiment formats in combination with the proper substrate (TMB-1000 or FEMTOMAX-110).
Comment:	Avidin Peroxidase Conjugated is a useful detection reagent for primary antibodies conjugated to biotin. Avidin Peroxidase Conjugated can be utilized in both Western Blotting and ELISA experiment formats in combination with the proper substrate (TMB-1000 or FEMTOMAX-110).
Restrictions:	For Research Use only

## Handling

Format:	Lyophilized
Reconstitution:	Reconstitution Buffer: Restore with deionized water (or equivalent), Reconstitution Volume: 1.0 mL
Concentration:	2.0 mg/mL
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative:	Gentamicin sulfate
Handling Advice:	Do NOT add Sodium Azide!
Storage:	4 °C
Expiry Date:	12 months



#### Western Blotting

Image 1. Detection of 20S Proteasome Subunits Modified by Reactive Oxygen Species after 2-DE. Images were taken from a study on a differential analysis of ROS sensitive 20S proteasome subunits, which were characterized using biotin-conjugated chemical reagents to visualize the degree of oxidation. A) Free thiol groups of murine 20S proteasome subunits were conjugated with iodoacetyl-LC-Biotin and probed with avidin-HRP. In this indirect assay, diminishing signal indicates an increasing level of oxidation. Parallel detection of free thiol groups in vehicle and ROS treated murine proteasome complexes demonstrated that the  $\alpha 2$ ,  $\beta 1$ ,  $\beta 3$  and  $\beta 5i$  subunits were oxidized at higher levels after ROS treatment. B) In parallel experiments, carbonylation was visualized by derivatization with 2,4-dinitrophenylhydrazine (DNPH) and probed with an anti-DNP antibody. In this direct assay, the increasing signal indicates higher levels of oxidation. Increased carbonyl modification of 20S proteasome subunits was detected for  $\alpha 2$ ,  $\alpha 4$ ,  $\alpha 6$  and  $\beta 3$  after ROS treatment. Figure 4. PMID: 19003867.

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