

Datasheet for 200-4697-0100**Avidin Antibody Biotin Conjugated****Overview**

Description:	Anti-AVIDIN (RABBIT) Antibody Biotin Conjugated - 200-4697-0100
Item No.:	200-4697-0100
Size:	100 µg
Applications:	ELISA, WB, FISH, IF
Reactivity:	Avidin
Host Species:	Rabbit

Product Details

Background:	Avidin is a glycoprotein with a molecular weight of approximately 62.4 kDa. Avidin is a biotin binding protein that shows high sequence homology in birds, reptiles and amphibians. Hen egg white avidin is a tetrameric protein composed of four identical subunits, each with the ability to bind biotin with high affinity and specificity ($K_d \sim 10^{15}$ M). In biotechnology, the functional consequence of tetrameric biotin binding is signal amplification. Biotin-avidin bridging is a great way to increase signal strength while maintaining specificity. The sequence of avidin only shows 30% homology with streptavidin, and anti-avidin and anti-streptavidin antibodies are not immunologically cross reactive. Biotin is widely used throughout the biotechnology industry to conjugate proteins for biochemical assays. Biotin's small size typically does not affect the biological activity of protein upon biotinylation. Biotinylated proteins of interest can be enriched from a sample due to highly stable interactions.
Synonyms:	rabbit anti-Avidin Antibody biotin Conjugation, Biotin conjugated rabbit anti-Avidin antibody, Avidin BAC, Anti-Avidin biotin Antibody, Egg White
Host Species:	Rabbit
Conjugate:	Biotin
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Avidin
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Immunogen Type:	Native Protein
Immunogen:	Avidin (Hen Egg White)
Purity/Specificity:	Anti-Avidin Antibody Biotin Conjugated is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-biotin, anti-Rabbit Serum, as well as purified and partially purified Avidin [Hen Egg White].
Relevant Links:	• UniProtKB - P02701

Application Details

Tested Applications:	ELISA, WB
Suggested Applications:	FISH, IF (Based on references)
Application Note:	Anti-Avidin Antibody Biotin Conjugated has been tested by ELISA and western blot and is suitable for immunohistochemistry, immunomicroscopy as well as other antibody based assays using streptavidin or avidin conjugates requiring lot-to-lot consistency.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:2,000 - 1:10,000
IHC:	1:250 - 1,000
WB:	1:500 - 1:2,500

Formulation

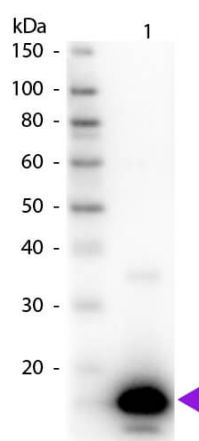
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
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Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of Rabbit anti-Avidin Biotin Conjugated Antibody. Lane 1: Avidin. Lane 2: None. Load: 100 ng per lane. Primary antibody: Avidin antibody at 1:1000 for 1h at RT. Secondary antibody: Peroxidase streptavidin secondary antibody at 1:40,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: ~17 kDa, ~17 kDa for monomeric Avidin. Other band(s): None.

References

- Giunta, S et al. CENP-A chromatin prevents replication stress at centromeres to avoid structural aneuploidy. *Proceedings of the National Academy of Sciences of the United States of America* (2021)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.