

**Datasheet for 200-4638S****Peroxidase (Horseradish) Antibody Biotin Conjugated****Overview**

|                      |                                                                               |
|----------------------|-------------------------------------------------------------------------------|
| <b>Description:</b>  | Anti-Peroxidase (Horseradish) (RABBIT) Antibody Biotin Conjugated - 200-4638S |
| <b>Item No.:</b>     | 200-4638S                                                                     |
| <b>Size:</b>         | 25 µL                                                                         |
| <b>Applications:</b> | Dot Blot, FC, IHC                                                             |
| <b>Reactivity:</b>   | Peroxidase                                                                    |
| <b>Host Species:</b> | Rabbit                                                                        |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| <b>Background:</b>   | 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. Biotin conjugated anti-Peroxidase antibodies are used as an amplifying reagent in immunohistochemistry, microarray assays, ELISAs, blots, and other applications. |
| <b>Synonyms:</b>     | rabbit anti-Horseradish Peroxidase Antibody Biotin Conjugation, rabbit anti-HRP Antibody Biotin Conjugation, Biotin Conjugated rabbit anti-HRP Antibody, Peroxidase Biotin Conjugated antibody, Anti-Peroxidase BAC Antibody                                                                                                                                                                                                                                                        |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Conjugate:</b>    | Biotin                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

**Target Details**

|                        |                          |
|------------------------|--------------------------|
| <b>Reactivity:</b>     | Peroxidase               |
| <b>Immunogen Type:</b> | Native Protein           |
| <b>Immunogen:</b>      | Peroxidase [Horseradish] |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity/Specificity:</b> | Anti-Peroxidase (Horseradish) 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 Peroxidase [Horseradish]. Cross reactivity against Peroxidase from other sources is unknown. |
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## Application Details

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| <b>Tested Applications:</b>    | Dot Blot                                                                                                                                                                                                                                                                  |
| <b>Suggested Applications:</b> | FC, IHC (Based on references)                                                                                                                                                                                                                                             |
| <b>Application Note:</b>       | Anti-Peroxidase Antibody Biotin Conjugated has been tested by dot blot and is suitable for immunoblotting, ELISA, immunohistochemistry, immunomicroscopy as well as other antibody based assays using streptavidin or avidin conjugates requiring lot-to-lot consistency. |
| <b>Assay Dilutions:</b>        | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                           |
| <b>IHC:</b>                    | User Optimized                                                                                                                                                                                                                                                            |
| <b>WB:</b>                     | User Optimized                                                                                                                                                                                                                                                            |

## Formulation

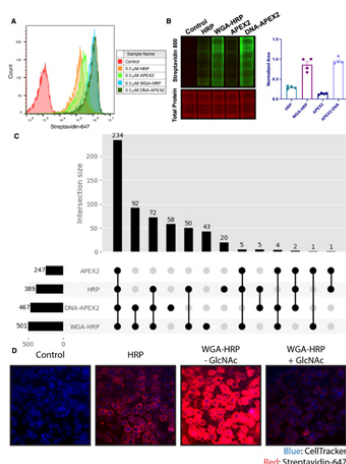
|                        |                                                                        |
|------------------------|------------------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                              |
| <b>Concentration:</b>  | 1.0 mg/mL by UV absorbance at 280 nm                                   |
| <b>Buffer:</b>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2             |
| <b>Preservative:</b>   | 0.01% (w/v) Sodium Azide                                               |
| <b>Stabilizer:</b>     | 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free |

## Shipping & Handling

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| <b>Shipping Condition:</b> | Dry Ice                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Storage Condition:</b>  | Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing. |

**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



### Flow Cytometry

(A) Biotinylation of Expi293 cells treated with free enzyme (APEX2 or HRP) or cell-tethered enzyme (DNA-APEX2 or WGA-HRP) shown by flow cytometry. Signal is read out using Streptavidin-AlexaFluor-647. (B) Comparison of cell labeling with either free enzyme (APEX2 or HRP) or cell-tethered enzyme (DNA-APEX2 or WGA-HRP) shown by Streptavidin-800 western blot and total protein stain. Normalized area is plotted to the right. (C) Number of cell membrane proteins identified by mass spectrometry (>2 unique peptides, <1% FDR, found in both biological replicates) after treating 500,000 KP-4 pancreatic cancer cells with either free enzyme (APEX2 or HRP) or cell-tethered enzyme (DNA-APEX2 or WGA-HRP). (D) Microscopy images depicting extent of labeling with free HRP compared to WGA-HRP with and without the blocking sugar GlcNAc. Additional images on citation. All western blot images, microscopy images, mass spectrometry data, and flow cytometry data are representative of two biological replicates. Figure 2.

PMID: 35257663

## References

- Yu N et al. Vendor-specific HRP antibody conjugate differences lead to unexpected immunoassay reagent interactions. *Bioanalysis*. (2026)
- Kirkemo LL et al. Cell-surface tethered promiscuous biotinylators enable comparative small-scale surface proteomic analysis of human extracellular vesicles and cells. *eLife*. (2022)

## 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.