

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

|                      |                                                                              |
|----------------------|------------------------------------------------------------------------------|
| <b>Description:</b>  | Anti-Peroxidase (Horseradish) (RABBIT) Antibody Biotin Conjugated - 200-4638 |
| <b>Item No.:</b>     | 200-4638                                                                     |
| <b>Size:</b>         | 10 mg                                                                        |
| <b>Applications:</b> | Dot Blot, FC, IHC                                                            |
| <b>Reactivity:</b>   | Peroxidase                                                                   |
| <b>Host Species:</b> | Rabbit                                                                       |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                      |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | Peroxidase described as the removal of hydrogen peroxide, oxidation of toxic reductants, biosynthesis and degradation of lignin, suberization, auxin catabolism, a response to environmental stresses such as wounding, a and pathogen attack and oxidative stress. These functions might be dependent on each isozyme/isoform in each plant tissue. |
| <b>Synonyms:</b>     | rabbit anti-Peroxidase Antibody biotin conjugation, rabbit anti-HRP antibody biotin conjugate, horseradish antibody biotin conjugated, rabbit anti Peroxidase biotin, rabbit anti HRP biotin                                                                                                                                                         |
| <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> | This product 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>ELISA:</b>                  | 1:20,000 - 1:100,000                                                                                                                                                                                                                                                      |
| <b>IHC:</b>                    | 1:1,000 - 1:5,000                                                                                                                                                                                                                                                         |
| <b>WB:</b>                     | 1:2,000 - 1:10,000                                                                                                                                                                                                                                                        |

## Formulation

|                               |                                                                        |
|-------------------------------|------------------------------------------------------------------------|
| <b>Physical State:</b>        | Lyophilized                                                            |
| <b>Concentration:</b>         | 10.0 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 |
| <b>Reconstitution Volume:</b> | 1.0 mL                                                                 |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)                           |

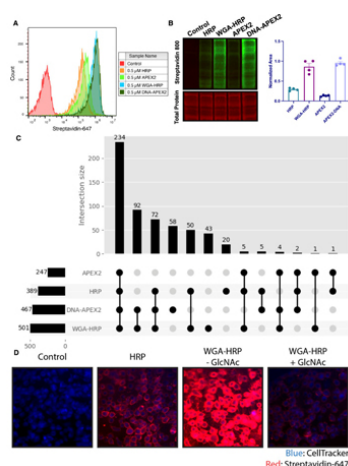
## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | Ambient |
|----------------------------|---------|

**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



## 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

- Kirkemo LL et al. Cell-surface tethered promiscuous biotinylation 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.