

**Datasheet for 600-105-387****R-Phycoerythrin Antibody Alkaline Phosphatase Conjugated****Overview**

|                      |                                                                                    |
|----------------------|------------------------------------------------------------------------------------|
| <b>Description:</b>  | Anti-R-Phycoerythrin (GOAT) Antibody Alkaline Phosphatase Conjugated - 600-105-387 |
| <b>Item No.:</b>     | 600-105-387                                                                        |
| <b>Size:</b>         | 1 mg                                                                               |
| <b>Applications:</b> | IHC                                                                                |
| <b>Reactivity:</b>   | Phycoerythrin                                                                      |
| <b>Host Species:</b> | Goat                                                                               |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| <b>Background:</b>   | Anti-R-Phycoerythrin Antibody Alkaline Phosphatase Conjugated generated in goat recognizes RPE. Phycoerythrin (PE) is a red protein-pigment present in red algae and cryptophytes and an accessory pigment to the main chlorophyll pigments responsible for photosynthesis. R-phycoerythrin is predominantly produced by red algae. The molecular weight of R-PE is 240kDa. Secondary Antibodies are available in a variety of formats and conjugate types. When choosing a secondary antibody product, consideration must be given to species and immunoglobulin specificity, conjugate type, fragment and chain specificity, level of cross-reactivity, and host-species source and fragment composition. This Anti-R-PE antibody is conjugated to Alk Phos. |
| <b>Synonyms:</b>     | goat anti-R-Phycoerythrin Antibody Alkaline Phosphatase Conjugation, Alk phos conjugated goat anti-R-Phycoerythrin Antibody                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Host Species:</b> | Goat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Conjugate:</b>    | Alkaline Phosphatase (AP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

**Target Details**

|                        |                                                                                                                                                                         |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reactivity:</b>     | Phycoerythrin                                                                                                                                                           |
| <b>Immunogen Type:</b> | Native Protein                                                                                                                                                          |
| <b>Immunogen:</b>      | This affinity purified antibody was prepared from whole goat serum produced by repeated immunizations with highly purified R-Phycoerythrin from the seaweed gracilaria. |

**Purity/Specificity:** This product was prepared from monospecific antiserum by immunoaffinity chromatography using a R-Phycoerythrin coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum, anti-Alkaline Phosphatase, and R-Phycoerythrin conjugated IgG. This antibody will cross react with B-Phycoerythrin. Reactivity with other phycobiliproteins is unknown.

## Application Details

|                                |                                                                                                                                                                                                                                                                                                                                                                                               |
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| <b>Suggested Applications:</b> | IHC (Based on references)                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Application Note:</b>       | Suitable for immunoblotting (western or dot blot), ELISA and immunohistochemistry as well as other phosphatase-antibody based enzymatic assays requiring lot-to-lot consistency. R-Phycoerythrin (240 kDa) is a labile molecule that may dissociate into components upon exposure to reducing or denaturing agents. Reaction with low molecular fragments is typically noted by western blot. |
| <b>Assay Dilutions:</b>        | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                               |
| <b>ELISA:</b>                  | 1:2,000 - 1:10,000                                                                                                                                                                                                                                                                                                                                                                            |
| <b>IHC:</b>                    | 1:200 - 1:1,000                                                                                                                                                                                                                                                                                                                                                                               |
| <b>WB:</b>                     | 1:500 - 1:2,500                                                                                                                                                                                                                                                                                                                                                                               |

## Formulation

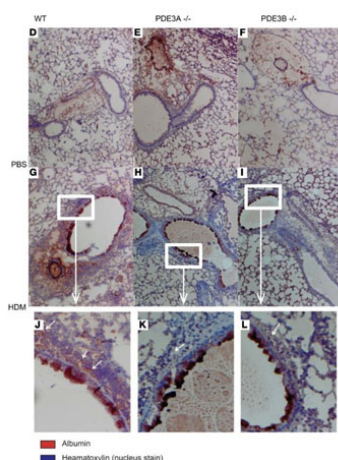
|                        |                                                                                                                           |
|------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                                                                                 |
| <b>Concentration:</b>  | 1.1 mg/mL by UV absorbance at 280 nm                                                                                      |
| <b>Buffer:</b>         | 0.05 M Tris Chloride, 0.15M Sodium Chloride, 0.001M Magnesium Chloride, 0.0001M Zinc Chloride, 50% (v/v) Glycerol; pH 8.0 |
| <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> | Wet Ice                                                                                                                                                                                                                                        |
| <b>Storage Condition:</b>  | Store vial at 4° C before opening. DO NOT FREEZE. This product is stable at 4° C as an undiluted liquid. Dilute only prior to immediate use. Freezing alkaline phosphatase conjugates will result in a substantial loss of enzymatic activity. |

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

## Images



### Immunohistochemistry

Immunohistochemistry of Anti-Phycoerythrin Antibody Alkaline Phosphatase Conjugated.

Less albumin extravasation in HDM-treated PDE3<sup>-/-</sup> mice compared with WT mice. (D–I) and  $\times 20$  magnification (J–L). Albumin positivity can be seen throughout the entirety of the lung tissue, but is mainly sequestered inside the large blood vessels, perivascular as well as peribronchial. Mucus was also stained for albumin. PBS-treated mice (A–C) were indistinguishable from each other concerning albumin content. WT HDM-treated mice (G and J) showed albumin positivity surrounding the bronchioles when compared with PDE3<sup>-/-</sup> mice (H, I, K, and L). Original magnification,  $\times 100$ . Zooming in on ( $\times 400$ ) the peribronchial region (highlighted with white rectangle), the smaller vasculature surrounding the bronchiole is albumin-positive in WT mice (J) (highlighted with white arrows) when compared with the PDE3<sup>-/-</sup> mice (K and L). Kruskal-Wallis test for multiple comparisons was used followed by Mann-Whitney U test. Data represent 2 separate experiments ( $n = 3$  for all PBS groups,  $n = 7$  for WT HDM,  $n = 5$  for both PDE3A<sup>-/-</sup> and PDE3B<sup>-/-</sup> HDM groups) and are shown as the mean  $\pm$  SEM. \* $P < 0.05$ . Figure 3. PMID: 29367458.

## References

- Beute et al. A pathophysiological role of PDE3 in allergic airway inflammation. *JCI Insight* (2018)

## 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.