

**Datasheet for 100-401-142****ALKALINE PHOSPHATASE Antibody****Overview**

|                      |                                                                             |
|----------------------|-----------------------------------------------------------------------------|
| <b>Description:</b>  | Anti-Alkaline Phosphatase (Human Intestine) (RABBIT) Antibody - 100-401-142 |
| <b>Item No.:</b>     | 100-401-142                                                                 |
| <b>Size:</b>         | 2 mL                                                                        |
| <b>Applications:</b> | WB, IF                                                                      |
| <b>Reactivity:</b>   | Human                                                                       |
| <b>Host Species:</b> | Rabbit                                                                      |

**Product Details**

|                      |                                                                                                                                                                                                                                                           |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | In most mammals there are four different isozymes: placental, placental-like, intestinal and tissue non-specific (liver/bone/kidney). Alkaline Phosphatase catalytic activity is phosphate monoester + H <sub>2</sub> O = an alcohol + phosphate.         |
| <b>Synonyms:</b>     | rabbit anti-Alkaline phosphatase antibody, Alkaline phosphatase intestinal antibody, Alkaline phosphomonoesterase antibody, ALPI antibody, Glycerophosphatase antibody, IAP antibody, Intestinal alkaline phosphatase antibody, Kasahara isozyme antibody |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                    |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                |
| <b>Format:</b>       | Antiserum                                                                                                                                                                                                                                                 |

**Target Details**

|                        |                                        |
|------------------------|----------------------------------------|
| <b>Gene Name:</b>      | ALP1                                   |
| <b>Reactivity:</b>     | Human                                  |
| <b>Immunogen Type:</b> | Native Protein                         |
| <b>Immunogen:</b>      | Alkaline Phosphatase [Human Intestine] |

**Purity/Specificity:** This product was prepared from monospecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-rabbit serum, purified and partially purified Alkaline Phosphatase [Human Intestine]. Cross reactivity against Alkaline Phosphatase from other tissues and species may occur but have not been specifically determined.

**Relevant Links:**

- [UniProtKB - P09923](#)
- [NCBI - NP\\_001622.2](#)
- [GeneID - 248](#)

## Application Details

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b>    | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Suggested Applications:</b> | IF (Based on references)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Application Note:</b>       | Anti-Alkaline Phosphatase has been tested by western blot and is suitable to be assayed against 1.0 µg of Alkaline Phosphatase [Human Intestine] in a standard ELISA using Peroxidase conjugated Affinity Purified anti-Rabbit IgG [H&L] (Goat) code #611-1302 and (ABTS (2,2'-azino-bis-[3-ethylbenthiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:5,000 to 1:20,000 of the reconstitution concentration is suggested for this product. |
| <b>Assay Dilutions:</b>        | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>ELISA:</b>                  | 1:5,000 - 1:20,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>WB:</b>                     | 1:500 - 1:2,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

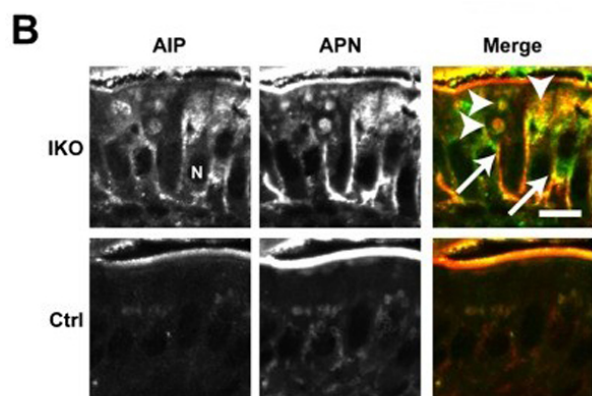
## Formulation

|                               |                                                            |
|-------------------------------|------------------------------------------------------------|
| <b>Physical State:</b>        | Lyophilized                                                |
| <b>Concentration:</b>         | 85 mg/mL by Refractometry                                  |
| <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>            | None                                                       |
| <b>Reconstitution Volume:</b> | 2.0 mL                                                     |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)               |

## Shipping & Handling

|                            |                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Ambient                                                                                                                                                                                                                                                                                                                                         |
| <b>Storage Condition:</b>  | 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. |
| <b>Expiration:</b>         | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                           |

## Images



### Immunofluorescence Microscopy

Localization of apical and basolateral proteins in the small intestine of Rab11a IKO mice at P21.

(B) Localization of the apical proteins AIP and APN in control (Ctrl) and IKO cells at P21. Merged figures of AIP and APN are shown on the right. Intracellular vacuoles of AIP and APN are indicated by arrowheads. Basolateral localization is indicated by arrows. Fig 3. PMID: 25527643



### Western Blot

Both the antiserum and IgG fractions of anti-Alkaline Phosphatase (Human Intestine) are shown to detect under reducing conditions of SDS-PAGE the 60,000 dalton enzyme in cellular extracts. Approximately 10 ug of total protein is loaded per lane. A 1:5,000 dilution of the primary antibody is used followed by detection using HRP Goat-a-Rabbit IgG [H&L] (611-1302) diluted 1:4,000 and color development using 4-CN substrate until sufficient color develops. Other detection systems will yield similar results.

## References

- Sobajima, T et al. Rab11a is required for apical protein localisation in the intestine. *Biology Open* (2014)

## 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.