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Datasheet for 100-4135

Alkaline Phosphatase Antibody

Overview

Description:	Anti-Alkaline Phosphatase (Calf Intestine) (RABBIT) Antibody - 100-4135
Item No.:	100-4135
Size:	2 mL
Applications:	IF, WB
Reactivity:	Bovine
Host Species:	Rabbit

Product Details

Background:	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 + H2O = an alcohol + phosphate.
Synonyms:	rabbit anti-Alkaline Phosphatase Antibody, Alkaline phosphomonoesterase antibody, ALPI antibody, Glycerophosphatase antibody, IAP antibody, Intestinal alkaline phosphatase antibody, Kasahara isozyme antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	ALP1
Reactivity:	Bovine
Immunogen Type:	Native Protein
Immunogen:	Alkaline Phosphatase [Calf 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 [Calf intestine]. Cross reactivity against Alkaline Phosphatase from other tissues and species may occur but have not been specifically determined. No reaction was observed against the bacterial form of the enzyme.
Relevant Links:	• UniProtKB - P19111 • GeneID - 280993

Application Details

Suggested Applications:	IF, WB (Based on references)
Application Note:	Anti-Alkaline Phosphatase has been assayed against 1.0 ug of Alkaline Phosphatase [Calf 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 1:2,000 to 1:8,000 of the reconstitution concentration is suggested for this product.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:4,000 - 1:20,000
WB:	1:500 - 1:2,000

Formulation

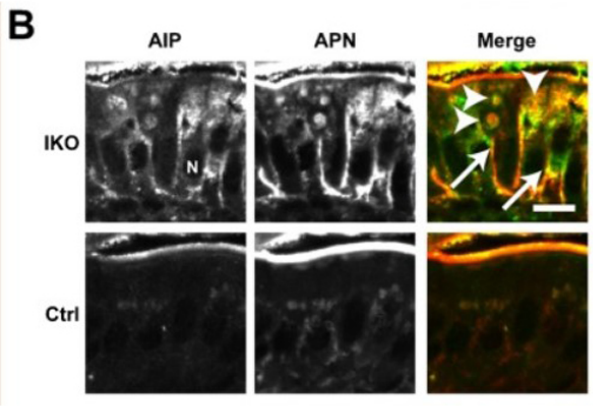
Physical State:	Lyophilized
Concentration:	85 mg/mL by Refractometry
Buffer:	0.01 M Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	2.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient

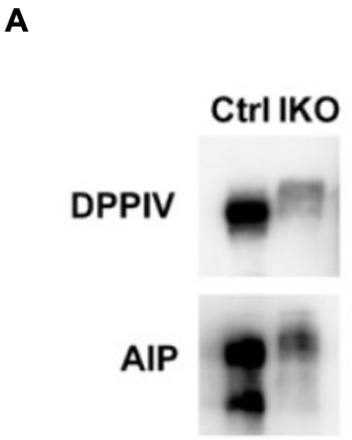
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an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

Images



Immunofluorescence Microscopy
Immunofluorescence of Anti-Alkaline Phosphatase Antibody.

Localization of apical and basolateral proteins in the small intestine of Rab11a IKO mice at P21. (B) Localization of the apical proteins alkaline phosphatase (AlP) and aminopeptidase N (APN) in control (Ctrl) and IKO cells at P21. Merged figures of AlP and APN are shown on the right. Intracellular vacuoles of AlP and APN are indicated by arrowheads. Basolateral localization is indicated by arrows. Scale bars: 10 µm. N, nucleus. Fig 3. PMID: 25527643.



Western Blot
Western Blot of Anti-Alkaline Phosphatase Antibody. Quantification of a starvation marker and protein levels. (A) Western blot analysis of protein levels in crude extracts from the small intestines of control (Ctrl) and IKO mice at P5. Small intestine extracts were analyzed by Western blot analysis using antibodies against various apical proteins (DPPIV and AlP), (additional not shown). Fig 5. PMID: 25527643.

References

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

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