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Datasheet for 600-401-BY4

Integrin alpha 4 Antibody

Overview

Description:	Anti-Integrin alpha 4 (RABBIT) Antibody - 600-401-BY4
Item No.:	600-401-BY4
Size:	100 µg
Applications:	ELISA, IF, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The integrin alpha 4 (also known as CD49d and ITGA4) belongs to the integrin alpha chain family of proteins. Integrins are heterodimeric integral membrane proteins composed of an alpha and beta chains. Alpha4 chain associates with either beta1 or beta7 chain. It has been demonstrated that the putative ligand-binding sites of both integrin alpha4beta1 and alpha4beta7 is located on the alpha4 chain. These ligands included Madcam, VCAM, and fibronectin. Madcam is known as the principal ligand for integrin alpha4beta7. Recently it was also demonstrated that HIV-1 envelope can mimic Madcam by binding to and signaling though integrin alpha4beta1, the gut mucosal homing receptor for peripheral T cells. At least two isoforms are known to exist.
Synonyms:	Integrin alpha 4 Antibody, IA4, CD49D, Integrin alpha-4, CD49 antigen-like family member D
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ITGA4
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Integrin alpha 4 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the internal region of human Integrin alpha 4.

Purity/Specificity:	Anti-Integrin alpha 4 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with Integrin alpha 4 from other sources has not been determined.
Relevant Links:	• UniProtKB - P13612 • GeneID - 3676 • NCBI - NP_000876

Application Details

Tested Applications:	ELISA, IF, WB
Application Note:	Anti-Integrin alpha 4 Antibody has been tested for use in ELISA, Western Blotting and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 115 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IF:	2 µg/mL
WB:	1 µg/mL

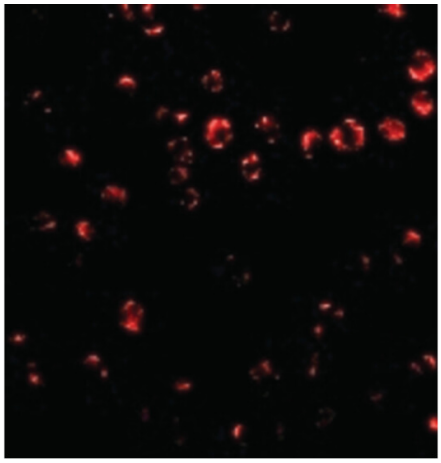
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

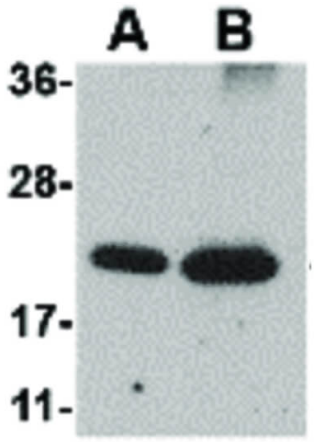
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. 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 Microscopy of Integrin alpha 4 antibody. Tissue: Jurkat cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Integrin alpha 4 antibody at 2 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: Integrin alpha 4 as a red fluorescent signal.



Western Blot
Western Blot of Integrin alpha 4 antibody. Lane A: 25ng of recombinant Integrin alpha 4 at 1 µg/mL. Lane B: 100ng of recombinant Integrin alpha 4 at 1 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 21.5 kDa, ~21 kDa for Integrin alpha 4.

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.