

Product datasheet

Anti-Integrin alpha 4/CD49D antibody [EPR1355Y] - BSA and Azide free ab239898

KO VALIDATED Recombinant RabMAB

4 Images

Overview

Product name	Anti-Integrin alpha 4/CD49D antibody [EPR1355Y] - BSA and Azide free
Description	Rabbit monoclonal [EPR1355Y] to Integrin alpha 4/CD49D - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide within Human Integrin alpha 4/CD49D aa 1000-1100 (C terminal). The exact sequence is proprietary. Database link: P13612
General notes	<p>ab239898 is the carrier-free version of ab81280 This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.</p> <p>Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>Ab239898 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.</p> <p><i>Maxpar® is a trademark of Fluidigm Canada Inc.</i></p> <p>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information. This product was previously labelled as Integrin alpha 4</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAB® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB® patents.</p>

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1355Y
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab239898** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 150 kDa.

Target

Function

Integrins alpha-4/beta-1 (VLA-4) and alpha-4/beta-7 are receptors for fibronectin. They recognize one or more domains within the alternatively spliced CS-1 and CS-5 regions of fibronectin. They are also receptors for VCAM1. Integrin alpha-4/beta-1 recognizes the sequence Q-I-D-S in VCAM1. Integrin alpha-4/beta-7 is also a receptor for MADCAM1. It recognizes the sequence L-D-T in MADCAM1. On activated endothelial cells integrin VLA-4 triggers homotypic aggregation for most VLA-4-positive leukocyte cell lines. It may also participate in cytolytic T-cell interactions with target cells.

Sequence similarities

Belongs to the integrin alpha chain family.
Contains 7 FG-GAP repeats.

Domain

The SG1 motif is involved in binding to chondroitin sulfate glycosaminoglycan and cell adhesion.

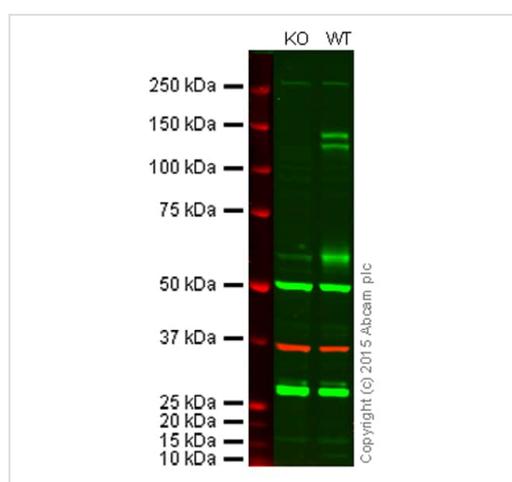
Post-translational modifications

Phosphorylation on Ser-1027 inhibits PXN binding.

Cellular localization

Membrane.

Images



Western blot - Anti-Integrin alpha 4/CD49D antibody [EPR1355Y] - BSA and Azide free (ab239898)

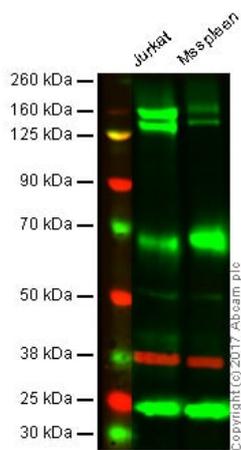
This data was developed using [ab81280](#), the same antibody clone in a different buffer formulation.

Lane 1: Integrin alpha 4 knockout HAP1 cell lysate (20 µg)

Lane 2: Wild-type HAP1 cell lysate (20 µg)

Lanes 1 and 2: Merged signal (red and green). Green - [ab81280](#) observed at 150 kDa. Red - loading control, [ab8226](#), observed at 42 kDa.

[ab81280](#) was shown to recognize Integrin alpha 4 in wild-type HAP1 cells along with additional cross-reactive bands. No bands were observed when Integrin alpha 4 knockout samples were used. Wild-type and Integrin alpha 4 knockout samples were subjected to SDS-PAGE. [ab81280](#) and [ab8226](#) (loading control to beta actin) were diluted 1/2000 and 1/1000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1/10,000 dilution for 1hr at room temperature before imaging.



Western blot - Anti-Integrin alpha 4/CD49D antibody [EPR1355Y] - BSA and Azide free (ab239898)

All lanes : Anti-Integrin alpha 4/CD49D antibody [EPR1355Y] (ab81280) at 1/1000 dilution

All lanes : Jurkat whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Performed under non-reducing conditions.

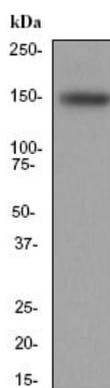
Predicted band size: 150 kDa

Observed band size: 150 kDa

This data was developed using ab81280, the same antibody clone in a different buffer formulation.

Lanes 1 - 2: Merged signal (red and green). Green - ab81280 observed at 150 kDa. Red - loading control, ab8245, observed at 37 kDa.

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using Licor blocking buffer before being incubated with ab81280 and ab8245 (loading control) overnight at 4°C. Antibody binding was detected using Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) at a 1:10000 dilution for 1hr at room temperature and then imaged.



Anti-Integrin alpha 4/CD49D antibody [EPR1355Y] ([ab81280](#)) at 1/2000 dilution + Jurkat cell lysate at 10 µg

Secondary

HRP labelled goat anti rabbit at 1/2000 dilution

Predicted band size: 150 kDa

Observed band size: 150 kDa

Western blot - Anti-Integrin alpha 4/CD49D antibody [EPR1355Y] - BSA and Azide free (ab239898)

This data was developed using [ab81280](#), the same antibody clone in a different buffer formulation.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Integrin alpha 4/CD49D antibody [EPR1355Y] - BSA and Azide free (ab239898)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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