


Product datasheet

Anti-Integrin alpha 4/CD49D antibody [EPR1355Y] ab81280

KO **VALIDATED** Recombinant RabMAb[®]

[10 References](#) [4 Images](#)

Overview

Product name	Anti-Integrin alpha 4/CD49D antibody [EPR1355Y]
Description	Rabbit monoclonal [EPR1355Y] to Integrin alpha 4/CD49D
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human Predicted to work with: Mouse 
Immunogen	Synthetic peptide within Human Integrin alpha 4/CD49D aa 1000-1100 (C terminal). The exact sequence is proprietary.
Positive control	Jurkat whole cell lysate (ab7899)
General notes	<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> <p>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1355Y
Isotype	IgG

Applications

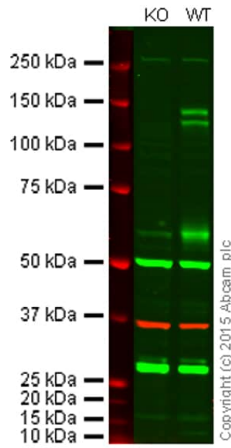
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab81280 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/2000. 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



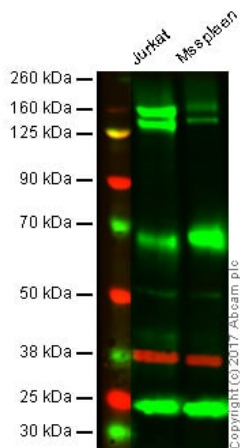
Western blot - Anti-Integrin alpha 4/CD49D antibody [EPR1355Y] (ab81280)

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] (ab81280)

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

Lane 1 : Jurkat whole cell lysate

Lane 2 : Mouse spleen tissue 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 reducing conditions.

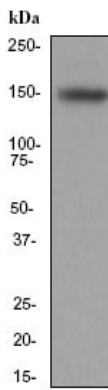
Predicted band size: 150 kDa

Observed band size: 150 kDa

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) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**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] (ab81280)

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] (ab81280)

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

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