

Product datasheet

Anti-Integrin alpha 4/CD49D antibody [HP2/1] ab22858

KO VALIDATED

[6 References](#) [1 Image](#)

Overview

Product name	Anti-Integrin alpha 4/CD49D antibody [HP2/1]
Description	Mouse monoclonal [HP2/1] to Integrin alpha 4/CD49D
Host species	Mouse
Specificity	This antibody recognises the 80kD alpha chain of VLA-4. Reacts with monocytes, T cells, B cells, thymocytes and Langerhans cells.
Tested applications	Suitable for: ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Tissue, cells or virus corresponding to Human Integrin alpha 4/CD49D. JM leukaemia line.
Positive control	ICC/IF: wildtype HAP-1 cells.
General notes	<p>Can be used in basic studies of VLA-4 mediated adhesion and its interaction with the VCAM-1 structure. HP2/1 inhibits cell binding to soluble VCAM-1.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>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, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.09% Sodium azide Constituent: PBS
Purity	Protein G purified
Primary antibody notes	Can be used in basic studies of VLA-4 mediated adhesion and its interaction with the VCAM-1

structure. HP2/1 inhibits cell binding to soluble VCAM-1.

Clonality	Monoclonal
Clone number	HP2/1
Myeloma	x63-Ag8.653
Isotype	IgG1

Applications

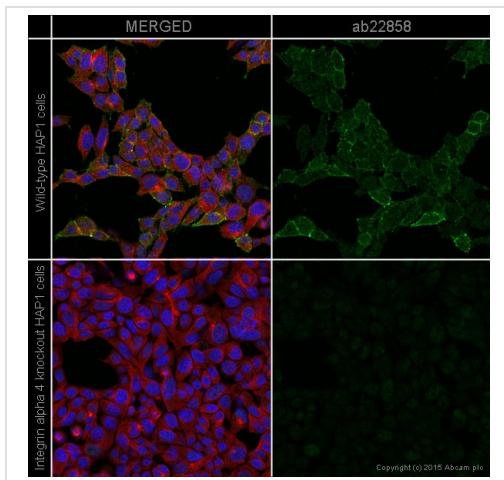
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab22858 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 5 µg/ml.

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



ab22858 staining Integrin alpha 4/CD49D in wild-type HAP1 cells (top panel) and Integrin alpha 4/CD49D knockout HAP1 cells (bottom panel). The cells were fixed with 4% formaldehyde (10min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab22858 at 5µg/ml concentration and **ab202272** at 1/250 dilution (shown in pseudo colour red) overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to Mouse IgG (Alexa Fluor® 488) (**ab150117**) at 2 µg/ml (shown in green). Nuclear DNA was labelled in blue with DAPI.

Immunocytochemistry/ Immunofluorescence - Anti-Integrin alpha 4/CD49D antibody [HP2/1] (ab22858)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors