

## Product datasheet

### Anti-Integrin alpha 4/CD49D antibody [44H6] ab220

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#### Overview

<b>Product name</b>	Anti-Integrin alpha 4/CD49D antibody [44H6]
<b>Description</b>	Mouse monoclonal [44H6] to Integrin alpha 4/CD49D
<b>Host species</b>	Mouse
<b>Specificity</b>	Recognises the Integrin alpha 4/CD49D subunit, which associates with either Integrin beta 1 (to form VLA 4) or beta 7. The alpha 4 integrin is a 150 kDa molecule, which may be cleaved to 80 kDa and 70 kDa fragments.
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt, ICC/IF <b>Unsuitable for:</b> IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Tissue, cells or virus corresponding to Integrin alpha 4/CD49D. HOON pre-B leukaemia cell line.
<b>Positive control</b>	Flow Cyt: Human whole peripheral blood cells. IHC-Fr: Human tonsil tissue. ICC/IF: Wild-type HAP-1 cells.
<b>General notes</b>	<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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.1% Sodium azide Constituent: PBS
<b>Purity</b>	Protein A purified
<b>Purification notes</b>	Purified IgG prepared by ion exchange chromatography from tissue culture supernatant.

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	44H6
<b>Myeloma</b>	Sp2/0-Ag14
<b>Isotype</b>	IgG1

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab220 in the following tested applications.

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

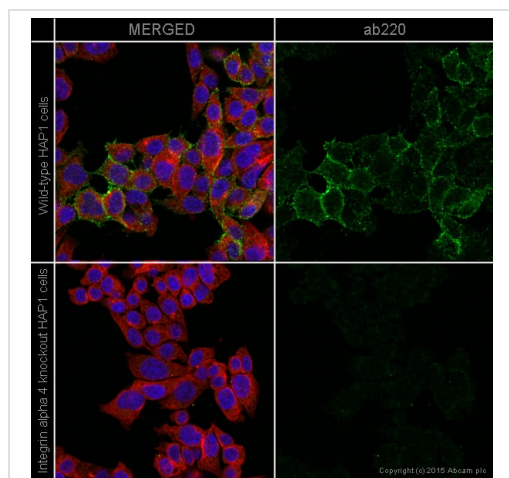
Application	Abreviews	Notes
Flow Cyt		1/40. Use 10 µl of the working dilution to label 100 µl of human whole peripheral blood.
ICC/IF		Use a concentration of 5 µg/ml.

**Application notes** Is unsuitable for IHC-P.

## Target

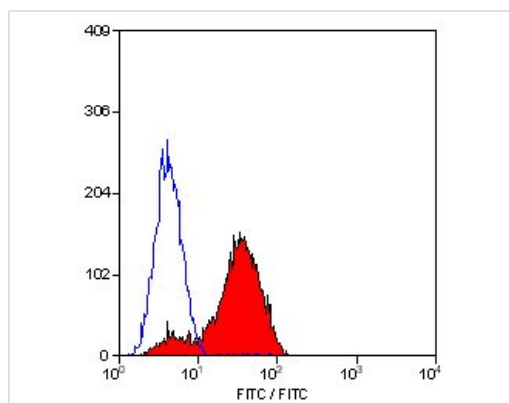
<b>Function</b>	Integrins alpha-4/beta-1 (VLA-4) and alpha-4/beta-7 are receptors for fibronectin. They recognize one or more domains within the alternatively spliced CS-1 and CS-5 regions of fibronectin. They are also receptors for VCAM1. Integrin alpha-4/beta-1 recognizes the sequence Q-I-D-S in VCAM1. 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.
<b>Sequence similarities</b>	Belongs to the integrin alpha chain family. Contains 7 FG-GAP repeats.
<b>Domain</b>	The SG1 motif is involved in binding to chondroitin sulfate glycosaminoglycan and cell adhesion.
<b>Post-translational modifications</b>	Phosphorylation on Ser-1027 inhibits PXN binding.
<b>Cellular localization</b>	Membrane.

## Images



Immunocytochemistry/ Immunofluorescence - Anti-Integrin alpha 4/CD49D antibody [44H6] (ab220)

ab220 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 ab220 at 5µg/ml concentration and [ab220272](#) 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.



Flow Cytometry - Anti-Integrin alpha 4/CD49D antibody [44H6] (ab220)

Staining of human peripheral blood lymphocytes with ab220.

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

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