Anti-Integrin alpha V antibody [P2W7] ab11470

Overview

Product name: Anti-Integrin alpha V antibody [P2W7]
Description: Mouse monoclonal [P2W7] to Integrin alpha V
Host species: Mouse
Tested applications: Suitable for: ICC/IF, Flow Cyt
Species reactivity: Reacts with: Human
Immunogen: Tissue, cells or virus corresponding to Human Integrin alpha V. Ocular melanoma cell line (V+B2) a clone expressing high levels of alpha-v, beta-1
Database link: P06756
Positive control: Tested with squamous cell carcinoma cells. A375M melanoma cell line. A549 cell line IF/ICC
General notes: Human alpha v is about 150-160kDa under non-reducing conditions. Under reducing conditions it is cleaved into 2 bands of about 125-130kDa +20-25kDa.
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.
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

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer: Preservative: 0.02% Sodium azide
Constituent: 99.98% PBS
Purity: Protein A purified
Purification notes: The antibody is Protein A purified from tissue culture supernatant.
Clonality: Monoclonal
Clone number: P2W7
Isotype: IgG1

Applications

The Abpromise guarantee: Our Abpromise guarantee covers the use of ab11470 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<th>Application</th>
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<td>ICC/IF</td>
<td>Use at an assay dependent concentration.</td>
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<tr>
<td>Flow Cyt</td>
<td>Use a concentration of 1 - 10 µg/ml. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.</td>
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Target

Function: The alpha-V integrins are receptors for vitronectin, cytotoactin, fibronectin, fibrinogen, laminin, matrix metalloproteinase-2, osteopontin, osteomodulin, prothrombin, thrombospondin and vWF. They recognize the sequence R-G-D in a wide array of ligands. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions.

Sequence similarities: Belongs to the integrin alpha chain family.

Cellular localization: Membrane.

Images

ICC/IF image of ab11470 stained A549 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab11470, 5µg/ml) overnight at +4°C. The secondary antibody (green) was ab96879, a goat anti-mouse DyLight® 488 (IgG; H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.
Overlay histogram showing A549 cells stained with ab11470 (red line). The cells were fixed with 80% methanol (5 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab11470, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was a goat anti-mouse DyLight® 488 (lgG; H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive result in 4% paraformaldehyde (10 min) fixed A549 cells used under the same conditions.

Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.

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

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- We investigate all quality concerns to ensure our products perform to the highest standards

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