# abcam

### Product datasheet

## Anti-Integrin alpha V beta 3 antibody [27.1 (VNR-1)] ab78289

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#### Overview

Product name	Anti-Integrin alpha V beta 3 antibody [27.1 (VNR-1)]		
Mouse monoclonal [27.1 (VNR-1)] to Integrin alpha V beta 3			
Host species	Mouse		
Tested applications	Suitable for: Flow Cyt Unsuitable for: IHC-P		
Species reactivity	Reacts with: Human		
Immunogen	The details of the immunogen for this antibody are not available.		
General notes	This product was changed from ascites to tissue culture supernatant on 17 May 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.		
	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 antibodie 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. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.	
Storage buffer	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: 1.45% Sodium chloride, 0.0536% PBS	
Purity	Tissue culture supernatant	
Purification notes	Purified from TCS.	
Clonality	Monoclonal	
Clone number	27.1 (VNR-1)	

#### Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab78289 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		Use at an assay dependent concentration. <u>ab170190</u> - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.

#### **Application notes**

Is unsuitable for IHC-P.

#### Target

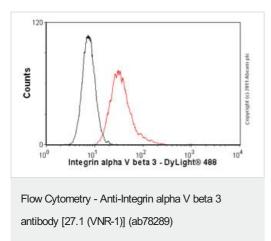
#### Relevance

Function: The alpha-V (ITGAV) integrins are receptors for vitronectin, cytotactin, 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. ITGAV:ITGB3 binds to fractalkine (CX3CL1) and may act as its coreceptor in CX3CR1dependent fractalkine signaling (PubMed:23125415). ITGAV:ITGB3 binds to NRG1 (via EGF domain) and this binding is essential for NRG1-ERBB signaling (PubMed:20682778). ITGAV: ITGB3 binds to FGF1 and this binding is essential for FGF1 signaling (PubMed:18441324). ITGAV:ITGB3 binds to IGF1 and this binding is essential for IGF1 signaling (PubMed:19578119). ITGAV:ITGB3 binds to PLA2G2A via a site (site 2) which is distinct from the classical ligand-binding site (site 1) and this induces integrin conformational changes and enhanced ligand binding to site 1 (PubMed:18635536, PubMed:25398877). ITGAV:ITGB3 and ITGAV:ITGB6 act as a receptor for fibrillin-1 (FBN1) and mediate R-G-D-dependent cell adhesion to FBN1 (PubMed:12807887, PubMed:17158881). (Microbial infection) Integrin ITGAV:ITGB5 acts as a receptor for adenovirus type C (PubMed:20615244). Integrin ITGAV:ITGB5 and ITGAV:ITGB3 act as receptors for coxsackievirus A9 and B1 (PubMed:9426447, PubMed:15194773, PubMed:7519807). Integrin ITGAV:ITGB3 acts as a receptor for herpes virus 8/HHV-8 (PubMed:18045938). Integrin ITGAV:ITGB6 acts as a receptor for herpes simplex 1/HHV-1 (PubMed:24367260). Integrin ITGAV:ITGB3 acts as a receptor for Human parechovirus 1 (PubMed:11160695). Integrin ITGAV:ITGB3 acts as a receptor for West nile virus (PubMed:23658209). In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions (PubMed:10397733). Similarity: Belongs to the integrin alpha chain family. Contains 7 FG-GAP repeats.

#### **Cellular localization**

Cell Membrane. Cytoplasmic. Integrin complex. Focal adhesion.

#### Images



Overlay histogram showing A431 cells stained with ab78289 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab78289, 2µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (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<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed.

This image was generated using the ascites version of the product.

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

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