

## ARG24072 anti-CD51 / Integrin alpha V antibody [RMV-7]

Package: 100 µg  
Store at: -20°C

### Summary

Product Description	Rat Monoclonal antibody [RMV-7] recognizes CD51 / Integrin alpha V
Tested Reactivity	Ms
Tested Application	FACS, IHC-Fr, IP
Host	Rat
Clonality	Monoclonal
Clone	RMV-7
Isotype	IgG1
Target Name	CD51 / Integrin alpha V
Species	Mouse
Immunogen	Cultured LAK cells from Balb/c mice.
Conjugation	Un-conjugated
Alternate Names	CD51; VNRA; CD antigen CD51; VTNR; Vitronectin receptor subunit alpha; Integrin alpha-V; MSK8

### Application Instructions

Application table	Application	Dilution
	FACS	1:10 - 1:100
	IHC-Fr	1:25 - 1:100
	IP	Assay-dependent

**Application Note** FACS: Use 10 µl of the suggested working dilution to label 10<sup>6</sup> cells in 100 µl.  
\* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide.
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Gene Symbol	ITGAV
Gene Full Name	integrin, alpha V
Background	<p>The product of this gene belongs to the integrin alpha chain family. Integrins are heterodimeric integral membrane proteins composed of an alpha subunit and a beta subunit that function in cell surface adhesion and signaling. The encoded preproprotein is proteolytically processed to generate light and heavy chains that comprise the alpha V subunit. This subunit associates with beta 1, beta 3, beta 5, beta 6 and beta 8 subunits. The heterodimer consisting of alpha V and beta 3 subunits is also known as the vitronectin receptor. This integrin may regulate angiogenesis and cancer progression. Alternative splicing results in multiple transcript variants. Note that the integrin alpha 5 and integrin alpha V subunits are encoded by distinct genes. [provided by RefSeq, Oct 2015]</p>
Function	<p>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 CX3CR1-dependent 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 FGF2 and this binding is essential for FGF2 signaling (PubMed:28302677). ITGAV:ITGB3 binds to IGF1 and this binding is essential for IGF1 signaling (PubMed:19578119). ITGAV:ITGB3 binds to IGF2 and this binding is essential for IGF2 signaling (PubMed:28873464). ITGAV:ITGB3 binds to IL1B and this binding is essential for IL1B signaling (PubMed:29030430). 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). Integrin alpha-V/beta-6 or alpha-V/beta-8 (ITGAV:ITGB6 or ITGAV:ITGB8) mediates R-G-D-dependent release of transforming growth factor beta-1 (TGF-beta-1) from regulatory Latency-associated peptide (LAP), thereby playing a key role in TGF-beta-1 activation (PubMed:15184403, PubMed:22278742, PubMed:28117447). ITGAV:ITGB3 act as a receptor for CD40LG (PubMed:31331973).</p> <p>(Microbial infection) Integrin ITGAV:ITGB5 acts as a receptor for Adenovirus type C.</p> <p>(Microbial infection) Integrin ITGAV:ITGB5 and ITGAV:ITGB3 act as receptors for Coxsackievirus A9 and B1.</p> <p>(Microbial infection) Integrin ITGAV:ITGB3 acts as a receptor for Herpes virus 8/HHV-8.</p> <p>(Microbial infection) Integrin ITGAV:ITGB6 acts as a receptor for herpes simplex 1/HHV-1.</p> <p>(Microbial infection) Integrin ITGAV:ITGB3 acts as a receptor for Human parechovirus 1.</p> <p>(Microbial infection) Integrin ITGAV:ITGB3 acts as a receptor for West Nile virus.</p> <p>(Microbial infection) In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions. [UniProt]</p>
Calculated Mw	115 kDa
Cellular Localization	Membrane; Single-pass type I membrane protein. Cell junction, focal adhesion. [UniProt]