
Product Name: KD-Validated Integrin Subunit Alpha V Recombinant Rabbit Monoclonal Antibody**Catalog #: KVAb01736**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:190-1:200
Molecular Weight	Calculated MW: 116.0kDa

Antigen Information

Gene Name	ITGAV
Alternative Names	ITGAV; Integrin Subunit Alpha V; CD51; MSK8; VNRA; VTNR; Integrin, Alpha V (Vitronectin Receptor, Alpha Polypeptide, Antigen CD51); Antigen Identified By Monoclonal Antibody L230; Vitronectin Receptor Subunit Alpha; Vitronectin Receptor; Integrin Alpha-V; Integrin AlphaVbeta3; Integrin, Alpha V; CD51 Antigen
Gene ID	3685.0
SwissProt ID	P06756
Immunogen	A synthesized peptide derived from human Integrin alpha V

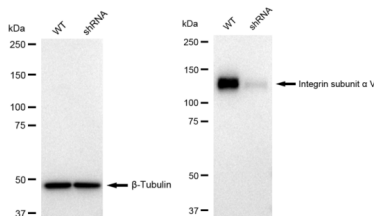
Background

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]

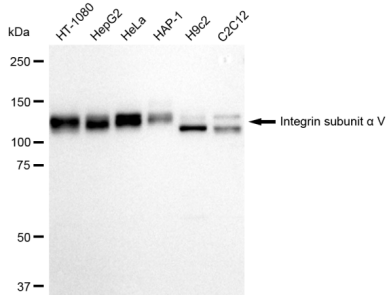
Research Area

Cardiovascular, Microbiology, Stem Cells

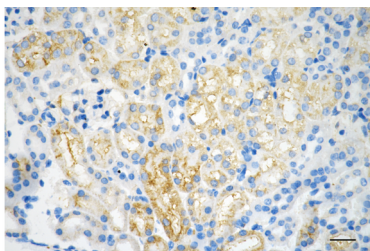
Image Data



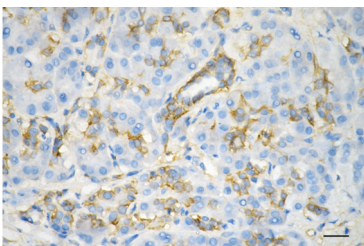
Western blotting analysis using Integrin subunit alpha V antibody (KVA01736). Integrin subunit alpha V expression in wild type (WT) and integrin subunit alpha V shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with Integrin subunit alpha V antibody (KVA01736, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



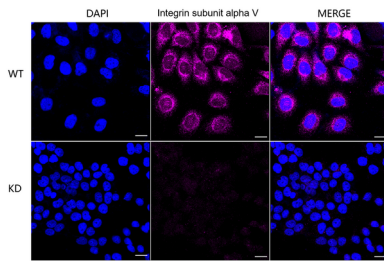
Western blotting analysis using Integrin subunit alpha V antibody (KVA01736). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Integrin subunit alpha V antibody (KVA01736, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



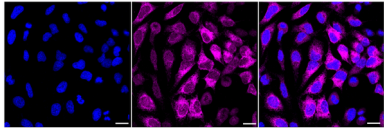
Immunohistochemistry was performed on paraffin-embedded mouse kidney using integrin subunit alpha V antibody (KVA01736, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



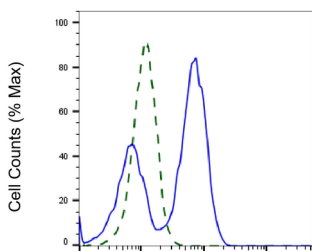
Immunohistochemistry was performed on paraffin-embedded human pancreatic adenocarcinoma using integrin subunit alpha V antibody (KVA01736, 1:100). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



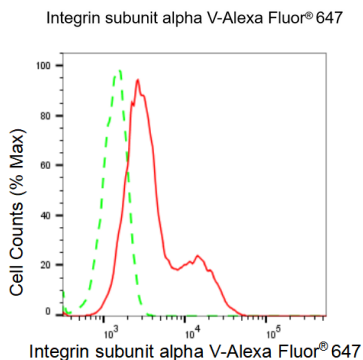
Immunocytochemical staining of HeLa cells using Integrin subunit alpha V antibody (KVA01736, 1:1,000), Top panel: wild-type (WT); Bottom panel: Integrin subunit alpha V shRNA knockdown (KD). Nuclei were stained blue with DAPI; Integrin subunit alpha V was stained magenta with Alexa Fluor® 647. Scale bar, 20 μm. Permeabilization: Triton.



Immunocytochemical staining of HeLa cells with Integrin subunit alpha V antibody (KVA01736, 1:1,000). Nuclei were stained blue with DAPI; Integrin subunit alpha V was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 μm.



Validation of Integrin subunit alpha V knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Integrin subunit alpha V antibody (KVA01736, 1:2,000) and analyzed using CytoFLEX.



Flow cytometric analysis of Integrin subunit alpha V expression in HeLa cells using Integrin subunit alpha V antibody (KVA01736, 1:2,000). Green, isotype control; red, Integrin subunit alpha V.