

ITGAV/Integrin Alpha V/CD51 Antibody
Rabbit Polyclonal Antibody
Catalog # ALS17083**Specification**

ITGAV/Integrin Alpha V/CD51 Antibody - Product Information

Application	IHC, WB
Primary Accession	P06756
Other Accession	3685
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	116038

ITGAV/Integrin Alpha V/CD51 Antibody - Additional Information**Gene ID** 3685**Other Names**

ITGAV, CD51, CD51 antigen, Integrin, alpha V, MSK8, Integrin Alpha V, Integrin alpha-V, VNRA, Vitronectin receptor, Integrin alphaVbeta3, VTNR

Target/Specificity

Human ITGAV/Integrin Alpha V/CD51

Reconstitution & Storage

PBS, pH 7.3, 0.02% sodium azide, 50% glycerol. Long term: -80°C; Short term: -20°C. Avoid freeze-thaw cycles.

Precautions

ITGAV/Integrin Alpha V/CD51 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ITGAV/Integrin Alpha V/CD51 Antibody - Protein Information**Name** ITGAV ([HGNC:6150](#))**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 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).

target="_blank">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 receptors 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 acts as a receptor for CD40LG (PubMed:31331973). ITGAV:ITGB3 acts as a receptor for IBSP and promotes cell adhesion and migration to IBSP (PubMed:10640428).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Cell junction, focal adhesion

Volume

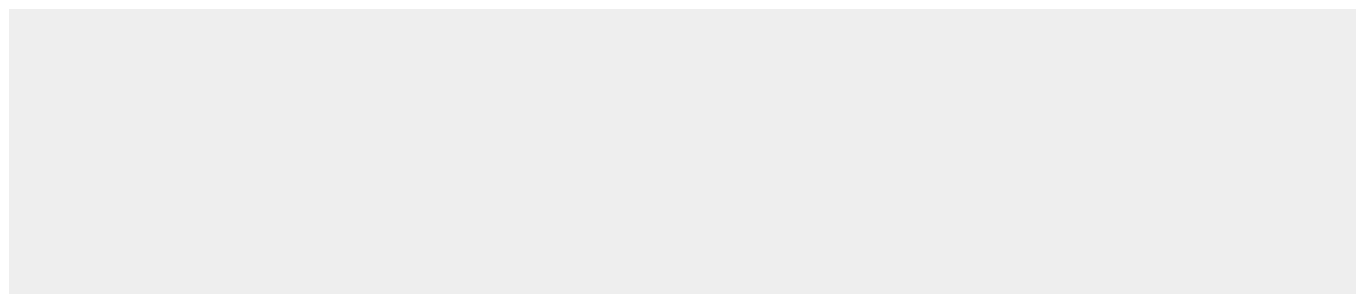
50 µl

ITGAV/Integrin Alpha V/CD51 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

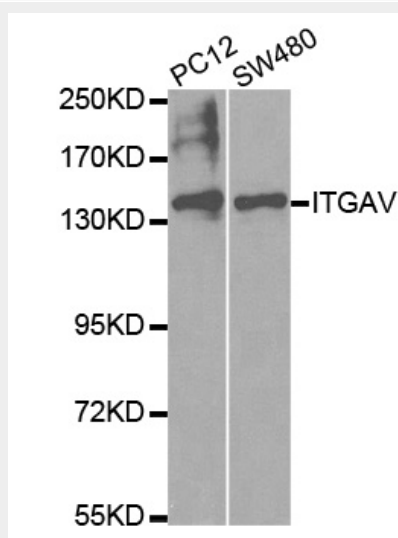
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ITGAV/Integrin Alpha V/CD51 Antibody - Images





Human Placenta: Formalin-Fixed, Paraffin-Embedded (FFPE)



Western blot analysis of extracts of various cell lines, using ITGAV antibody.

ITGAV/Integrin Alpha V/CD51 Antibody - Background

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. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions.

ITGAV/Integrin Alpha V/CD51 Antibody - References

Suzuki S.,et al.J. Biol. Chem. 262:14080-14085(1987).
Sims M.A.,et al.Cytogenet. Cell Genet. 89:268-271(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Totoki Y.,et al.Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.
Hillier L.W.,et al.Nature 434:724-731(2005).