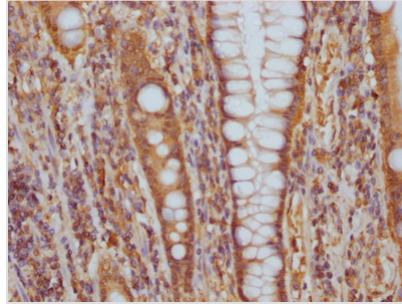


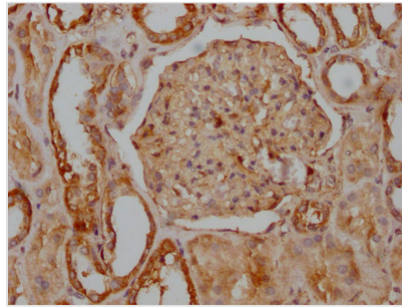


ITGAV Recombinant Monoclonal Antibody

Product Code	CSB-RA548303A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P06756
Immunogen	A synthesized peptide derived from human Integrin alpha V
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	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 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).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cardiovascular; Microbiology; Signal transduction; Stem cells
Gene Names	ITGAV
Clone No.	4G7
Image	



IHC image of CSB-RA548303A0HU diluted at 1:100 and staining in paraffin-embedded human colon cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4^o overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA548303A0HU diluted at 1:100 and staining in paraffin-embedded human kidney tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4^o overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The ITGAV recombinant monoclonal antibody was prepared by protein technology and DNA recombinant technology. Initially, a synthesized peptide derived from human ITGAV was used to immunize mice. After a period of time, the spleen was removed from the mice under aseptic conditions, and the total RNA of the spleen cells was extracted. The cDNA synthesized by RNA reverse transcription was used as a template for PCR amplification of the ITGAV antibody gene. The gene was then introduced into a vector and transfected into host cells for culture. The ITGAV recombinant monoclonal antibody was purified from the supernatant of the cell culture by affinity chromatography. It was thoroughly verified and can be used in ELISA and IHC experiments to detect human ITGAV protein.

The ITGAV protein is a transmembrane receptor protein that is involved in cell adhesion, migration, proliferation, and survival. Upon ligand binding, ITGAV triggers intracellular signaling pathways that regulate cellular responses such as cytoskeletal rearrangements, gene expression, and cell proliferation. It plays a crucial role in development, wound healing, and angiogenesis, and is implicated in the pathogenesis of several diseases, including cancer, cardiovascular disease, and inflammatory disorders.