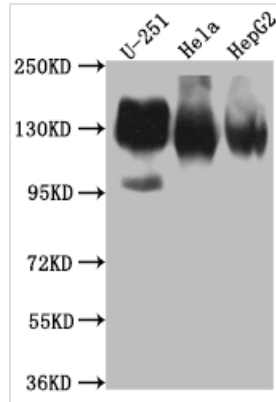




ITGAV Recombinant Monoclonal Antibody

Product Code	CSB-RA279866A0HU
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, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	<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 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).</p>
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.	5G3
Image	



Western Blot

Positive WB detected in: U-251 whole cell lysate, HeLa whole cell lysate, HepG2 whole cell lysate

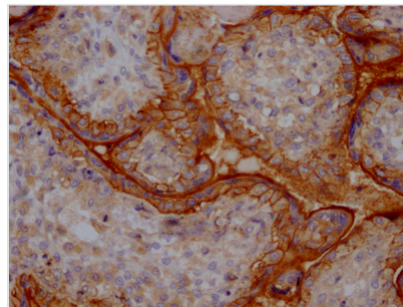
All lanes: ITGAV antibody at 1:1000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 117, 113, 112 kDa

Observed band size: 130 kDa



IHC image of CSB-RA279866A0HU diluted at 1:100 and staining in paraffin-embedded human placenta 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°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The production process of the ITGAV recombinant monoclonal antibody comprises four steps: sequencing the gene that codes for the ITGAV monoclonal antibody, cloning the gene into a plasmid vector, transfecting the recombinant vector into a host cell line, purifying the ITGAV recombinant monoclonal antibody from the cell culture supernatant using affinity chromatography, and testing and characterizing the purified antibody. The ITGAV monoclonal antibody is produced from hybridomas that produce the ITGAV antibody. To produce the ITGAV monoclonal antibody, a synthesized peptide derived from human ITGAV is used as the immunogen. This ITGAV recombinant monoclonal antibody is recommended for ELISA, WB, and IHC applications in detecting human ITGAV protein.

The ITGAV protein is a transmembrane protein that plays a role in cell adhesion and signaling. It forms heterodimers with other integrin subunits, such as Integrin beta-1, to bind to extracellular matrix proteins, such as fibronectin and vitronectin, and modulate cell behavior. Specifically, ITGAV is involved in regulating cell migration, proliferation, differentiation, and survival, as well as angiogenesis and wound healing. Dysregulation of ITGAV has been linked to various diseases, including cancer, osteoporosis, and autoimmune disorders.