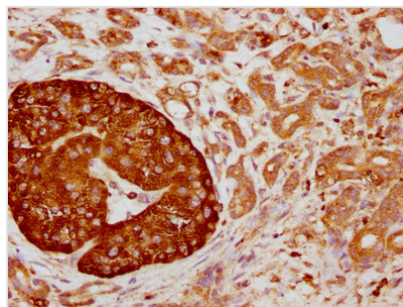


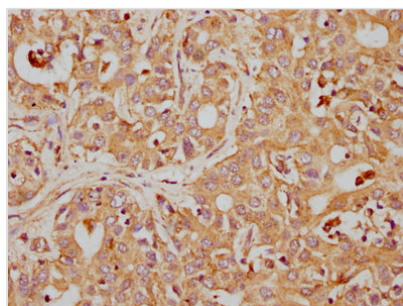


CD63 Recombinant Monoclonal Antibody

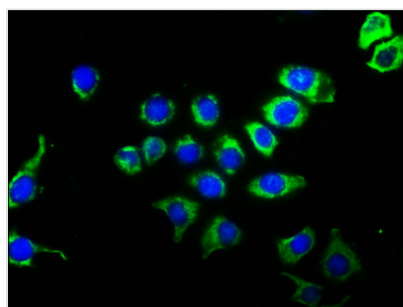
Product Code	CSB-RA004950A0HU
Abbreviation	CD63 antigen
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P08962
Immunogen	A synthesized peptide derived from human CD63
Species Reactivity	Human
Tested Applications	ELISA, IHC, IF; Recommended dilution: IHC:1:50-1:200, IF:1:20-1:200
Relevance	Functions as cell surface receptor for TIMP1 and plays a role in the activation of cellular signaling cascades. Plays a role in the activation of ITGB1 and integrin signaling, leading to the activation of AKT, FAK/PTK2 and MAP kinases. Promotes cell survival, reorganization of the actin cytoskeleton, cell adhesion, spreading and migration, via its role in the activation of AKT and FAK/PTK2. Plays a role in VEGFA signaling via its role in regulating the internalization of KDR/VEGFR2. Plays a role in intracellular vesicular transport processes, and is required for normal trafficking of the PMEL luminal domain that is essential for the development and maturation of melanocytes. Plays a role in the adhesion of leukocytes onto endothelial cells via its role in the regulation of SELP trafficking. May play a role in mast cell degranulation in response to Ms4a2/FcεRI stimulation, but not in mast cell degranulation in response to other stimuli.
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
Alias	CD63 antigen, Granulophysin, Lysosomal-associated membrane protein 3, LAMP-3, Melanoma-associated antigen ME491, OMA81H, Ocular melanoma-associated antigen, Tetraspanin-30, Tspan-30, CD63, CD63, MLA1, TSPAN30
Immunogen Species	Homo sapiens (Human)
Research Area	Cardiovascular
Gene Names	CD63
Clone No.	2E5
Image	



IHC image of CSB-RA004950A0HU diluted at 1:155 and staining in paraffin-embedded human pancreatic 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? overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



IHC image of CSB-RA004950A0HU diluted at 1:155 and staining in paraffin-embedded human liver 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? overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence staining of A549 cells with CSB-RA004950A0HU at 1:51, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4?. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

The CD63 recombinant monoclonal antibody is produced using DNA recombinant technology and in vitro genetic manipulation. The process begins with immunizing an animal with a synthesized peptide derived from human CD63. B cells are isolated and screened to select positive cells. Single clone identification is performed to ensure the purity of the antibody. The genes encoding the light and heavy chains of the CD63 antibody are amplified through PCR and inserted into a plasmid vector to create a recombinant vector. This vector is then transfected into a host cell line for antibody expression. The CD63 recombinant monoclonal antibody is purified from the cell culture supernatant using affinity chromatography. It is specifically designed to bind to human CD63 protein and can be used in ELISA, IHC, and IF applications.

CD63 is involved in multiple cellular processes, including cell adhesion, migration, signaling, and vesicular trafficking. It is also known to be involved in exosome biogenesis, where it helps to sort and package proteins and lipids into intraluminal vesicles for release into the extracellular space. CD63 is a marker of exosomes and is often used as a reference marker for the isolation and characterization of these extracellular vesicles. CD63 also participates in antigen presentation, as it plays a role in the transport of MHC class II



molecules to the cell surface.