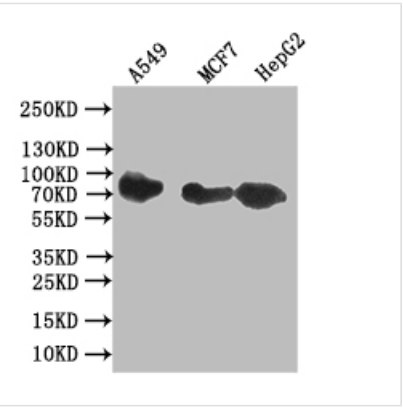
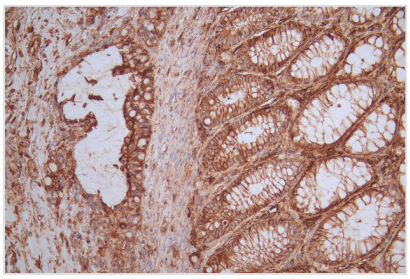
CD44 Recombinant Monoclonal Antibody

Product Code	CSB-RA292372A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P16070
Immunogen	A synthesized peptide derived from Human CD44
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC, IF, FC; Recommended dilution: WB:1:500-1:2000, IHC:1:50-1:200, IF:1:50-1:200, FC:1:50-1:200
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;Immunology;Stem cells
Gene Names	CD44
Clone No.	19H12

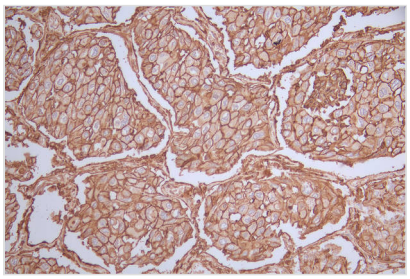
Image



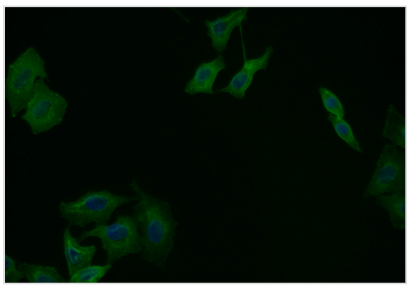
Western Blot
Positive WB detected in: A549 whole cell lysate, MCF7 whole cell lysate, HepG2 whole cell lysate
All lanes: CD44 antibody at 1:1000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 81 kDa
Observed band size: 81 kDa



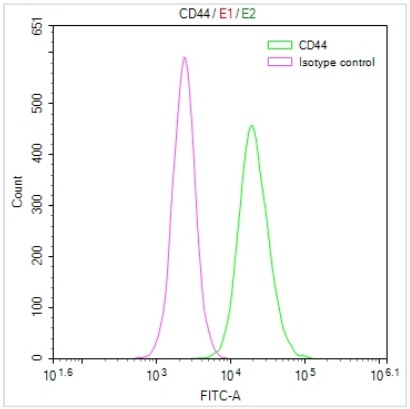
IHC image of CSB-RA292372A0HU diluted at 1:50 and staining in paraffin-embedded human rectal cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.51% DAB.



IHC image of CSB-RA292372A0HU diluted at 1:50 and staining in paraffin-embedded human lung 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°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.51% DAB.



Immunofluorescence staining of Hela with CSB-RA292372A0HU at 1:25, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 515-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Overlay Peak curve showing Hela cells surface stained with CSB-RA292372A0HU (red line) at 1:50. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1μg/1*10^6cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?.Control antibody (green line) was rabbit IgG (1μg/1*10^6cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The generation of the CD44 recombinant monoclonal antibody relies on in vitro expression systems, which are established by cloning the DNA sequences of CD44 antibodies from immunoreactive rabbits. The immunogen employed in this process is a synthesized peptide derived from the human CD44 protein. Subsequently, the genes encoding the CD44 antibodies are inserted into plasmid vectors, and these recombinant plasmid vectors are then transfected into host cells to facilitate antibody expression. Following expression, the CD44

recombinant monoclonal antibody undergoes affinity-chromatography purification and is thoroughly tested for functionality in ELISA, WB, IHC, IF, and FC applications, confirming its reactivity with the human CD44 protein.

CD44 is a versatile cell surface glycoprotein with numerous functions in cell adhesion, migration, signaling, and immune responses. Its roles extend to various physiological processes and pathological conditions, including inflammation, cancer, tissue development, and stem cell regulation.