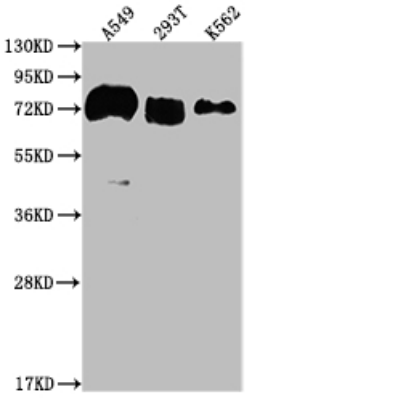
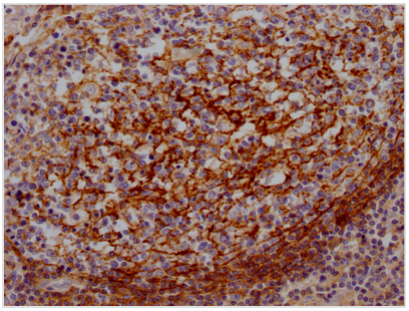
CD55 Antibody

Product Code	CSB-RA440943A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P08174
Immunogen	A synthesized peptide derived from human CD55
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	This protein recognizes C4b and C3b fragments that condense with cell-surface hydroxyl or amino groups when nascent C4b and C3b are locally generated during C4 and c3 activation. Interaction of daf with cell-associated C4b and C3b polypeptides interferes with their ability to catalyze the conversion of C2 and factor B to enzymatically active C2a and Bb and thereby prevents the formation of C4b2a and C3bBb, the amplification convertases of the complement cascade.
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	Immunology
Gene Names	CD55
Accession NO.	1A5

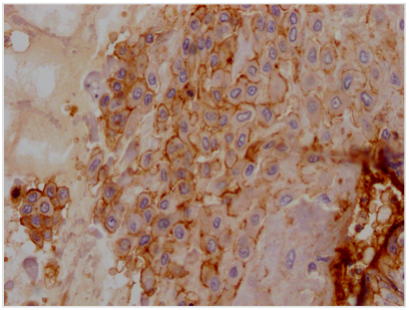
Image



Western Blot
Positive WB detected in: A549 whole cell lysate, 293T whole cell lysate, K562 whole cell lysate
All lanes: CD55 antibody at 1:2000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 42, 49, 40, 57, 60 kDa
Observed band size: 70 kDa



IHC image of CSB-RA440943A0HU diluted at 1:100 and staining in paraffin-embedded human lung 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.



IHC image of CSB-RA440943A0HU 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

CD55 is a GPI-anchored molecule found on leukocytes, erythrocytes, and serum-exposed stromal cells that accelerates the decay of the complement convertases C3 and C5. CD55 is involved in complement-independent processes and is hijacked by various viral and bacterial pathogens to increase cell adhesion and invasion in addition to acting as a complement regulator. CD55 has been identified as a critical host receptor for malaria parasite infection. CD55 also serves as a binding partner for CD97, whose expression is rapidly increased when T and B cells are activated. CD55 is associated with cancer, protein-losing enteropathy, and malaria, among other illnesses. CD55 loss causes complement hyperactivation, malabsorption, and angiopathic thrombosis in some cases of protein-losing enteropathy.

The recombinant CD55 antibody is a monoclonal antibody generated by cloning CD55 antibody genes into plasma vectors and transfecting vector clones into stable cell lines for production. For recombinant antibody generation, mammalian cell lines like CHO cells and HEK293 are commonly used. The recombinant CD55 antibody was purified using Affinity-chromatography. It has verified to detect CD55 protein from Human in the ELISA, WB, IHC.