

Basic Information

Product Name	Anti-CD55 Antibody (Clone#5B9E1)	
Gene Name	CD55	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG1	
Species Reactivity	human	
Tested Application	WB, IHC, ICC/IF, IF	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human CD55 recombinant protein (Position: D35-K347). Human CD55 shares 49.1% amino acid (aa) sequence identity with mouse CD55.	
Concentration	500 ug/ml	
Purification	protein G purified.	
Observed MW	70-75 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Immunofluorescence (IF):	1:50-400
	(Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Complement decay-accelerating factor, also known as CD55 or DAF, is a protein that, in humans, is encoded by the CD55 gene. This gene encodes a glycoprotein involved in the regulation of the complement cascade. Binding of the encoded protein to complement proteins accelerates their decay, thereby disrupting the cascade and preventing damage to host cells. Antigens present on this protein constitute the Cromer blood group system (CROM). Alternative splicing results in multiple transcript variants. The predominant transcript variant encodes a membrane-bound protein, but alternatively spliced transcripts may produce soluble proteins.

Selected Validation Data

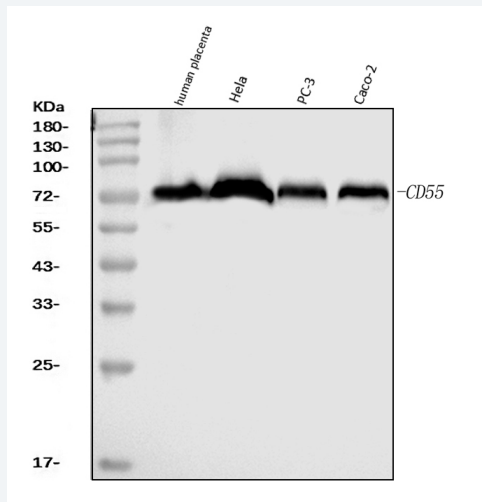


Figure 1. Western blot analysis of CD55 using anti-CD55 antibody (M00910-4). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,

Lane 2: HELA whole cell lysates,

Lane 3: PC-3 whole cell lysates,

Lane 4: CACO-2 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-CD55 antigen affinity purified monoclonal antibody (M00910-4) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for CD55 at approximately 70-75 kDa. The expected band size for CD55 is at 41 kDa.

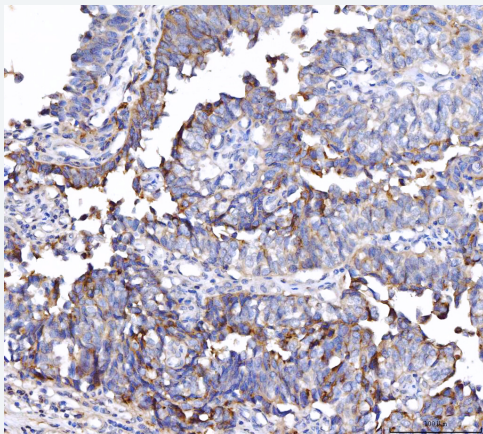


Figure 2. IHC analysis of CD55 using anti-CD55 antibody (M00910-4).

CD55 was detected in a paraffin-embedded section of human Bladder epithelial carcinoma tissue. The tissue section was incubated with mouse anti-CD55 Antibody (M00910-4) at a dilution of 1:200 and developed using HRP Conjugated mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB (Catalog # AR1022) as the chromogen.

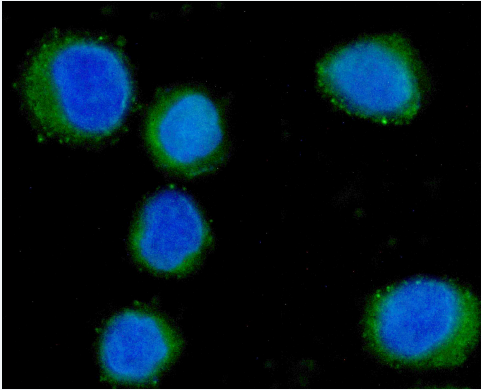


Figure 7. IF analysis of CD55 using anti-CD55 antibody (M00910-4).

CD55 was detected in an immunocytochemical section of SiHa cells. The section was incubated with mouse anti-CD55 Antibody (M00910-4) at a dilution of 1:100. Dylight488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog#BA1126) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).

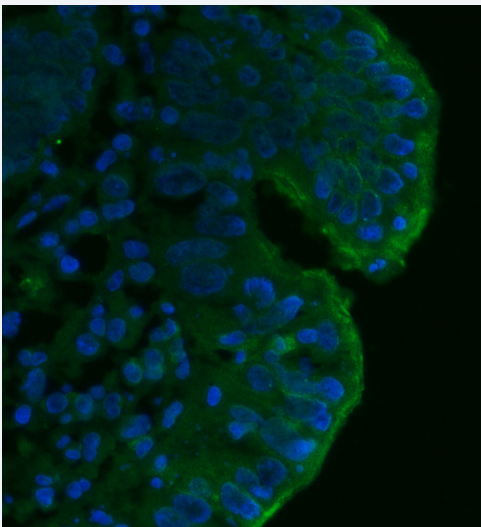


Figure 8. IF analysis using anti- CD55 Antibody (M00910-4). detected in paraffin-embedded section of human intestinal cancer tissues. The tissue section were stained using the Dylight488 conjugated Anti-mouse IgG Secondary Antibody ((green)(Catalog # BA1126) and counterstained with DAPI (blue).