

## Basic Information

<b>Product Name</b>	Anti-CD55 Antibody	
<b>Gene Name</b>	CD55	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human	
<b>Tested Application</b>	WB, IHC, FCM, ICC/IF, IF	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human CD55 recombinant protein (Position: D35-K347). Human CD55 shares 49.1% amino acid (aa) sequence identity with mouse CD55.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	70-75 kDa	
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Immunofluorescence (IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (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

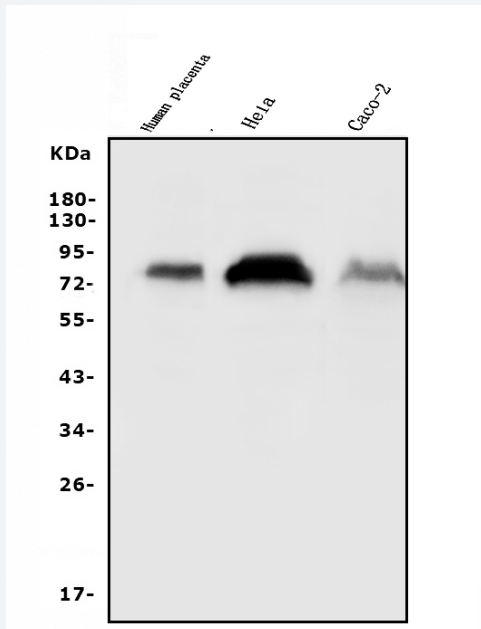


Figure 1. Western blot analysis of CD55 using anti-CD55 antibody (PB9487). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,

Lane 2: human HELA whole cell lysates,

Lane 3: human CACO-2 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-CD55 antigen affinity purified polyclonal antibody (PB9487) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). 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.

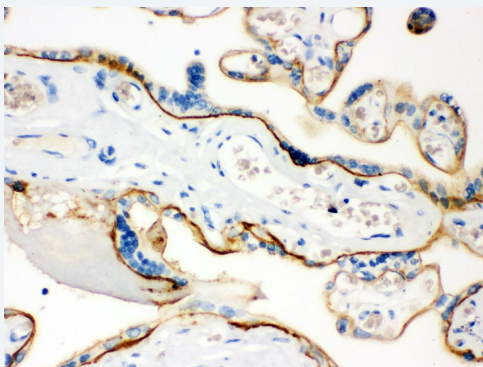


Figure 2. IHC analysis of CD55 using anti-CD55 antibody (PB9487).

CD55 was detected in a paraffin-embedded section of human placenta tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-CD55 Antibody (PB9487) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1022) as the chromogen.

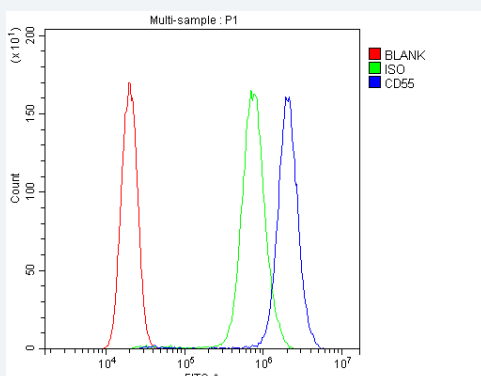


Figure 3. Flow Cytometry analysis of PC-3 cells using anti-CD55 antibody (PB9487).

Overlay histogram showing PC-3 cells stained with PB9487 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD55 Antibody (PB9487) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at

20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

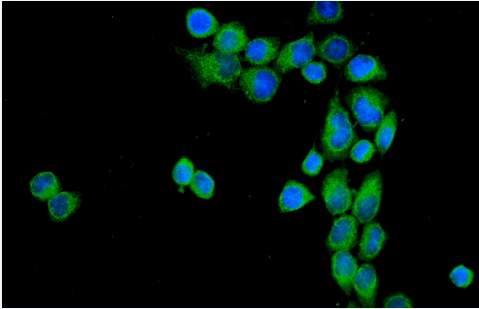


Figure 5. IF analysis of CD55 using anti-CD55 antibody (PB9487).

CD55 was detected in an immunocytochemical section of SiHa cells. The section was incubated with rabbit anti-CD55 Antibody (PB9487) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).

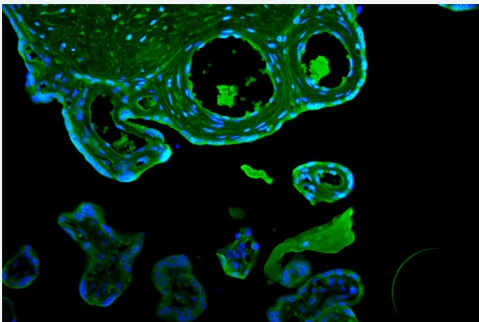


Figure 6. IF analysis using anti- CD55 antibody (PB9487). detected in paraffin-embedded section of human placenta tissue. The tissue section were stained using the DyLight488 conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog#BA1127) and counterstained with DAPI (blue).