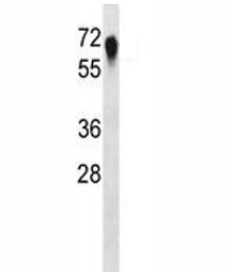
CD55 Rabbit Polyclonal Antibody (F44173)

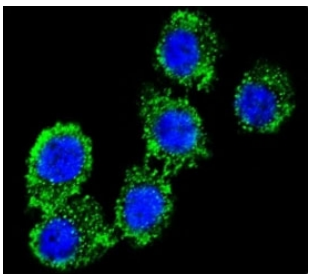
Catalog No.	Formulation	Size
F44173-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F44173-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

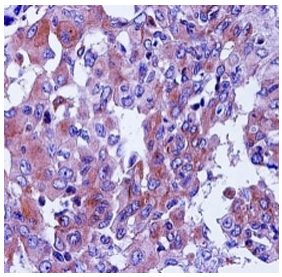
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P08174
Applications	Western blot: 1:1000 Immunofluorescence: 1:10-1:50 IHC (Paraffin): 1:10-1:50 Flow Cytometry: 1:10-1:50
Limitations	This CD55 Rabbit Polyclonal Antibody is available for research use only.



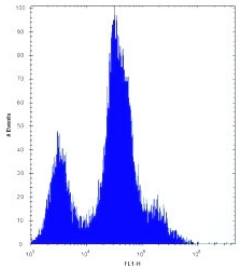
CD55 Rabbit Polyclonal Antibody western blot analysis in HeLa lysate. Observed molecular weight: 41~70 kDa.



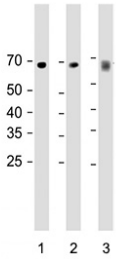
Confocal immunofluorescent analysis of CD55 antibody with HeLa cells followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used as a nuclear counterstain (blue).



CD55 Rabbit Polyclonal Antibody immunohistochemistry analysis in formalin fixed and paraffin embedded human lung adenocarcinoma.



CD55 Rabbit Polyclonal Antibody flow cytometric analysis of HeLa cells (right histogram) compared to a negative control (left histogram). FITC-conjugated goat-anti-rabbit secondary Ab was used for the analysis.



Western blot testing of human 1) HeLa, 2) MDA-MB-231 and 3) A431 cell lysate with CD55 antibody. Observed molecular weight: 41~70 kDa depending on glycosylation level.

Description

CD55 Rabbit Polyclonal Antibody targets CD55, also known as decay-accelerating factor (DAF), a cell surface glycoprotein that protects host cells from complement-mediated damage. CD55 is attached to the plasma membrane through a glycosylphosphatidylinositol (GPI) anchor and belongs to the regulators of complement activation family. It inhibits complement amplification by accelerating the dissociation of C3 and C5 convertases in the classical, lectin, and alternative complement pathways.

CD55 plays an important role in maintaining cellular integrity and preventing excessive complement activation. Loss of CD55 and other GPI-anchored proteins contributes to the pathology of paroxysmal nocturnal hemoglobinuria (PNH), while inherited CD55 deficiency causes CHAPLE disease, a disorder associated with complement hyperactivation and protein-losing enteropathy. CD55 also carries antigens of the Cromer blood group system. Altered CD55 expression has been investigated in cancer, inflammation, and immune evasion, particularly in relation to resistance against complement-dependent cellular injury. CD55 Rabbit Polyclonal Antibody supports research into complement regulation, membrane protein expression, and the mechanisms that protect cells from inappropriate immune attack.

For a published monoclonal antibody targeting this complement regulatory protein, see our CD55 Antibody clone 143-30.

Application Notes

Titration of the CD55 Rabbit Polyclonal Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 51-79 from the human protein was used as the immunogen for this CD55 antibody.

Storage

Aliquot the CD55 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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