

CD55 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14798A

Specification

CD55 Antibody (N-term) - Product Information

Application	WB, IHC-P, IF, FC,E
Primary Accession	P08174
Other Accession	NP_000565.1 , NP_001108224.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	41400
Antigen Region	51-79

CD55 Antibody (N-term) - Additional Information

Gene ID 1604

Other Names

Complement decay-accelerating factor, CD55, CD55, CR, DAF

Target/Specificity

This CD55 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 51-79 amino acids from the N-terminal region of human CD55.

Dilution

WB~~1:1000
IHC-P~~1:10~50
IF~~1:10~50
FC~~1:10~50
E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CD55 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CD55 Antibody (N-term) - Protein Information

Name CD55

Synonyms CR, DAF

Function 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 (PubMed:[7525274](#)). Inhibits complement activation by destabilizing and preventing the formation of C3 and C5 convertases, which prevents complement damage (PubMed:[28657829](#)).

Cellular Location

[Isoform 1]: Cell membrane; Single-pass type I membrane protein [Isoform 3]: Secreted [Isoform 5]: Secreted [Isoform 7]: Cell membrane; Lipid-anchor, GPI-anchor

Tissue Location

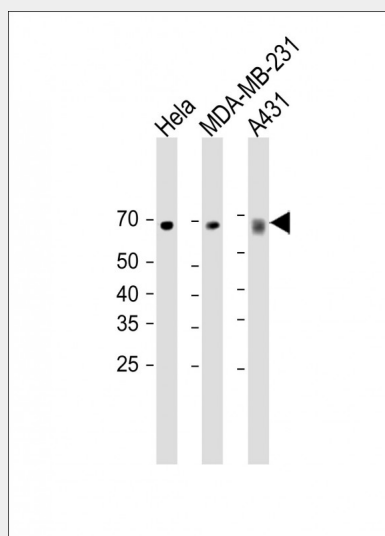
Expressed on the plasma membranes of all cell types that are in intimate contact with plasma complement proteins. It is also found on the surfaces of epithelial cells lining extracellular compartments, and variants of the molecule are present in body fluids and in extracellular matrix

CD55 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

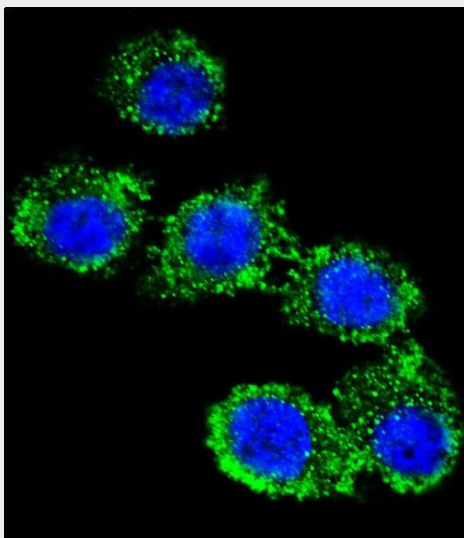
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD55 Antibody (N-term) - Images

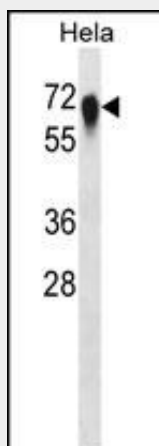


All lanes: Anti-CD55 Antibody (N-term) at 1:500 dilution Lane 1: HeLa whole cell lysate Lane 2:

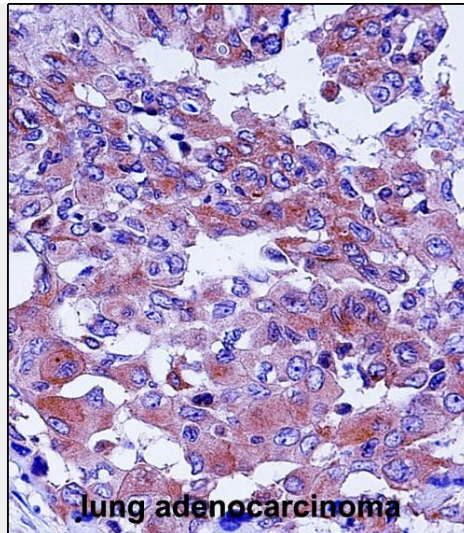
MDA-MB-231 whole cell lysate Lane 3: A431 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 65 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



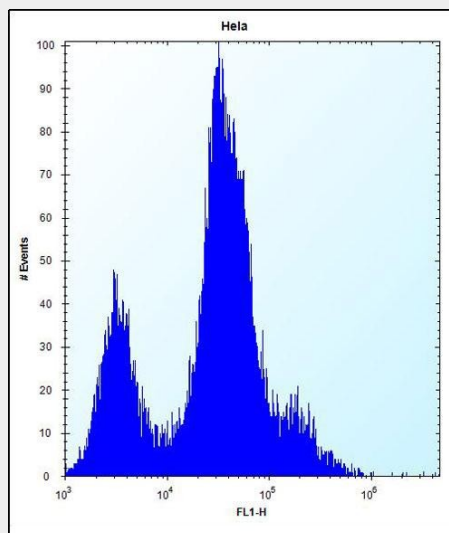
Confocal immunofluorescent analysis of CD55 Antibody (N-term) (Cat#AP14798a) with HeLa cells followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclei (blue).



CD55 Antibody (N-term) (Cat. #AP14798a) western blot analysis in HeLa cell line lysates (35 µg/lane). This demonstrates the CD55 antibody detected the CD55 protein (arrow).



CD55 Antibody (N-term) (Cat. #AP14798a) immunohistochemistry analysis in formalin fixed and paraffin embedded human lung adenocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CD55 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



CD55 Antibody (N-term) (Cat. #AP14798a) flow cytometric analysis of HeLa cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CD55 Antibody (N-term) - Background

This gene encodes a protein involved in the regulation of the complement cascade. The encoded glycoprotein is also known as the decay-accelerating factor (DAF); binding of DAF to complement proteins accelerates their decay, disrupting the cascade and preventing damage to host cells. Antigens present on the DAF glycoprotein constitute the Cromer blood group system (CROM). Two alternatively spliced transcripts encoding different proteins have been identified. The predominant transcript encodes a membrane-bound protein expressed on cells exposed to plasma component proteins but an alternatively spliced transcript produces a soluble protein present at much lower levels. Additional,

alternatively spliced transcript variants have been described, but their biological validity has not been determined. [provided by RefSeq].

CD55 Antibody (N-term) - References

Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010) :
Gustafsson, D.J., et al. Virology 405(2):474-482(2010)
Alegretti, A.P., et al. Cell. Immunol. 265(2):127-132(2010)
Kim, Y., et al. Ann. Clin. Lab. Sci. 40(3):226-232(2010)
Storry, J.R., et al. Transfusion 43(3):340-344(2003)

CD55 Antibody (N-term) - Citations

- [Ultrasound-enhanced scintillation proximity assay for rapid diagnostics.](#)
- [Development of a radionuclide-labeled monoclonal anti-CD55 antibody with theranostic potential in pleural metastatic lung cancer.](#)