

#### **CD55 Antibody**

Mouse Monoclonal Antibody (Mab)
Catalog # AM2092b

### **Specification**

## **CD55 Antibody - Product Information**

Application WB,E
Primary Accession P08174

Other Accession NP\_001108224.1

Reactivity Human
Host Mouse
Clonality Monoclonal

Isotype IgG1
Calculated MW 41400
Antigen Region 51-79

### **CD55 Antibody - Additional Information**

#### **Gene ID 1604**

#### **Other Names**

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

#### Target/Specificity

This CD55 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 51-79 amino acids from human CD55.

# **Dilution**

WB~~1:2000

E~~Use at an assay dependent concentration.

#### **Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

#### 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 is for research use only and not for use in diagnostic or therapeutic procedures.

## **CD55 Antibody - Protein Information**

## Name CD55

Synonyms CR, DAF



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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**

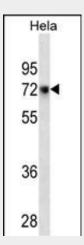
Expressed on the plasma membranes of all cell types that are in intimate contact with plasma complement proteins. It is also found on the surfaces of epithelial cells lining extracellular compartments, and variants of the molecule are present in body fluids and in extracellular matrix

### **CD55 Antibody - Protocols**

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

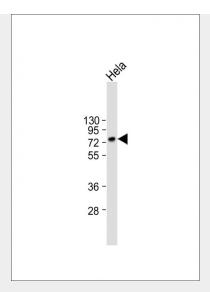
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# CD55 Antibody - Images



CD55 Antibody(Cat. #AM2092b) western blot analysis in Hela cell line lysates (35µg/lane). This demonstrates the CD55 antibody detected the CD55 protein (arrow).





Anti-CD55 Antibody (N-term) at 1:2000 dilution + Hela whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 41 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# **CD55 Antibody - 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 - 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)