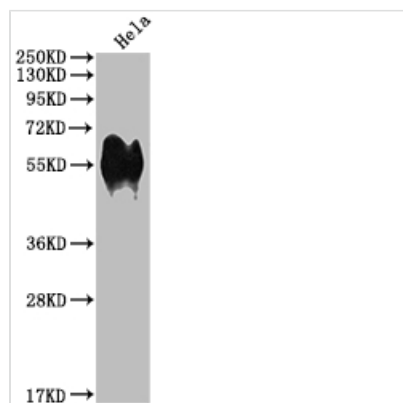




# CD46 Recombinant Monoclonal Antibody

<b>Product Code</b>	CSB-RA908548A0HU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	P15529
<b>Immunogen</b>	A synthesized peptide derived from human CD46
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
<b>Relevance</b>	Acts as a cofactor for complement factor I, a serine protease which protects autologous cells against complement-mediated injury by cleaving C3b and C4b deposited on host tissue. May be involved in the fusion of the spermatozoa with the oocyte during fertilization. Also acts as a costimulatory factor for T-cells which induces the differentiation of CD4+ into T-regulatory 1 cells. T-regulatory 1 cells suppress immune responses by secreting interleukin-10, and therefore are thought to prevent autoimmunity.
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Immunology
<b>Gene Names</b>	CD46
<b>Clone No.</b>	7D12

## Image



### Western Blot

Positive WB detected in: Hela whole cell lysate

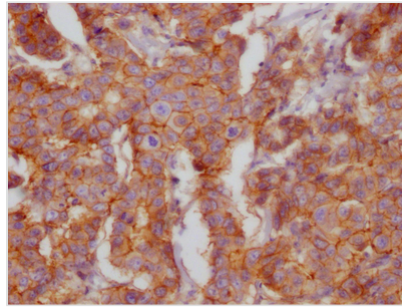
All lanes: CD46 antibody at 1:1000

Secondary

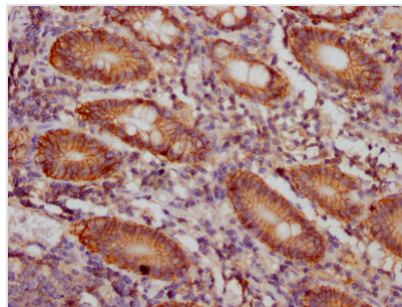
Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 44, 45, 43, 41, 42, 40, 37 kDa

Observed band size: 56 kDa



IHC image of CSB-RA908548A0HU diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica Bond<sup>TM</sup> system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA908548A0HU diluted at 1:100 and staining in paraffin-embedded human colon cancer performed on a Leica Bond<sup>TM</sup> system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

## Description

CD46, a ubiquitously expressed complement regulatory protein, serves as a cofactor for serine protease factor I to cleave and inactivate C3b and C4b deposited on host cells. It protects host cells from injury by complement. CD46 also plays roles in human reproduction, and autophagy, modulating T cell activation and effector functions. CD46 deficiencies contribute to inflammatory disorders, its overexpression in cancers and role as a receptor for some adenoviruses has led to its targeting by oncolytic agents and adenoviral-based therapeutic vectors, including coronavirus disease of 2019 (COVID-19) vaccines.

The vectors expressing anti-CD46 antibody were constructed as follows: immunizing an animal with A synthesized peptide derived from human CD46, isolating the positive splenocyte and extracting RNA, obtaining DNA by reverse transcription, sequencing and screening CD46 antibody gene, and amplifying heavy and light chain sequence by PCR and cloning them into plasma vectors. After that, the vector clones were transfected into the mammalian cells for production. The product is the recombinant CD46 antibody. Recombinant CD46 antibody in the culture medium was purified using Affinity-chromatography. It can react with CD46 protein from Human and is used in the ELISA, WB, IHC.