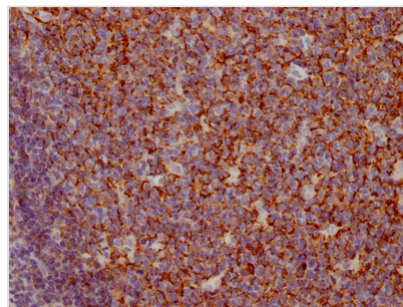




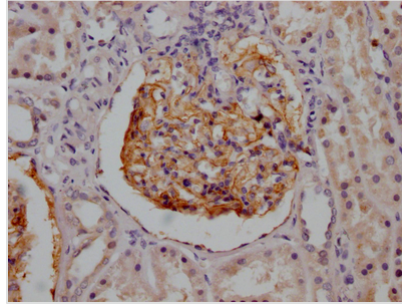
# CR1 Antibody

<b>Product Code</b>	CSB-RA714310A0HU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	P17927
<b>Immunogen</b>	A synthesized peptide derived from human CD35
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
<b>Relevance</b>	Mediates cellular binding of particles and immune complexes that have activated complement.
<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; Stem cells
<b>Gene Names</b>	CR1
<b>Accession NO.</b>	9A9

## Image



IHC image of CSB-RA714310A0HU diluted at 1:100 and staining in paraffin-embedded human tonsil tissue performed on a Leica Bond™ 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°C 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-RA714310A0HU diluted at 1:100 and staining in paraffin-embedded human kidney tissue performed on a Leica Bond™ 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°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

## Description

CR1, also known as CD35, is a single chain, type I transmembrane glycoprotein that belongs to the regulators of complement activation (RCA) family. It's a C3b and C4b membrane receptor found on erythrocytes, leukocytes, and podocytes. It aids in the elimination of immune complexes as well as pathogens coated in C3b and C4b. On erythrocytes, CR1 is responsible for the Knops blood group. It also acts as a cofactor for factor 1-mediated cleavage of C3b to iC3b, C3c, and C3dg, which regulates complement cascade activation by limiting the synthesis of classical and alternative route convertases and acting as a cofactor for factor 1-mediated cleavage of C3b to iC3b, C3c, and C3dg. The difference in expression of CR1 seems to correlate directly with the development of systemic lupus erythematosus (SLE) and severe forms of malaria.

The first step in the preparation of recombinant CR1 antibody is to obtain the CR1 antibody gene. The heavy and light chain genes of the antibody were constructed into a plasma vector and then transfected into suspended mammalian cells transiently. After expression verification, cell supernatant was collected in expanded culture and purified recombinant CR1 antibody was obtained using Affinity-chromatography. This recombinant CR1 antibody has been validated for the detection of CR1 protein from Human in the ELISA, IHC.