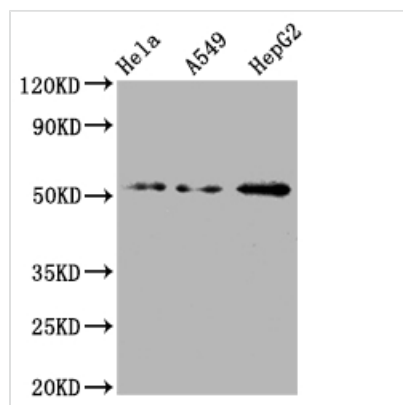




# CD47 Recombinant Monoclonal Antibody

<b>Product Code</b>	CSB-RA802124A0HU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	Q08722
<b>Immunogen</b>	A synthesized peptide derived from human CD47
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, WB, IHC, IF; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200
<b>Relevance</b>	Has a role in both cell adhesion by acting as an adhesion receptor for THBS1 on platelets, and in the modulation of integrins. Plays an important role in memory formation and synaptic plasticity in the hippocampus (By similarity). Receptor for SIRPA, binding to which prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells. Interaction with SIRPG mediates cell-cell adhesion, enhances superantigen-dependent T-cell-mediated proliferation and costimulates T-cell activation. May play a role in membrane transport and/or integrin dependent signal transduction. May prevent premature elimination of red blood cells. May be involved in membrane permeability changes induced following virus infection.
<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>	Cancer; Immunology
<b>Gene Names</b>	CD47
<b>Clone No.</b>	4G11
<b>Image</b>	



#### Western Blot

Positive WB detected in: HeLa whole cell lysate, A549 whole cell lysate, HepG2 whole cell lysate

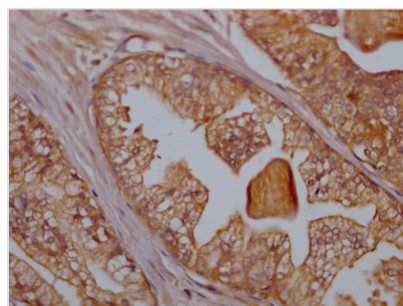
All lanes: CD47 antibody at 1:2000

#### Secondary

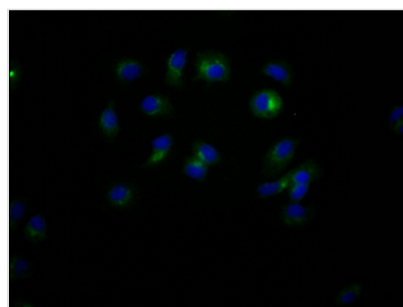
Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 36, 32, 34 kDa

Observed band size: 55 kDa



IHC image of CSB-RA802124A0HU diluted at 1:100 and staining in paraffin-embedded human prostate 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.



Immunofluorescence staining of MCF7 Cells with CSB-RA802124A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4?. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

## Description

CD47, also known as integrin-associated protein, is a cell surface ligand expressed in low amounts by nearly all cells of the body. It plays an important role in numerous immunological responses as well as autoimmunity by providing a powerful "don't eat me" signal to prevent phagocytosis. CD47 is also indispensable for other cellular functions including proliferation, phagocytosis, apoptosis, adhesion, migration, immune homeostasis, and inhibition of NO signal transduction. CD47 is overexpressed in many hematological malignancies, and its association with SIRP on phagocytic cells inhibits cancer cells from being phagocytosed. CD47 overexpression is frequently linked to poor clinical outcomes.

The recombinant CD47 antibody is a monoclonal antibody made in vitro using the CD47 antibody genes that are typically expressed from a plasmid in a stable mammalian cell line. The genes coding for the CD47 antibody will ultimately assemble into a fully functional antibody after translation. The synthesized antibody is the recombinant antibody against CD47. It underwent purification using Affinity-chromatography. This recombinant CD47 antibody is suitable for



use in the ELISA, WB, IHC, IF to detect the CD47 protein from Human.