

CD47 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9137b

Specification

CD47 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	Q08722
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	35214
Antigen Region	288-315

CD47 Antibody (C-term) - Additional Information

Gene ID 961

Other Names

Leukocyte surface antigen CD47, Antigenic surface determinant protein OA3, Integrin-associated protein, IAP, Protein MER6, CD47, CD47, MER6

Target/Specificity

This CD47 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 288-315 amino acids from the C-terminal region of human CD47.

Dilution

WB~~1:1000

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

CD47 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CD47 Antibody (C-term) - Protein Information

Name CD47

Synonyms MER6

Function Adhesive protein that mediates cell-to-cell interactions (PubMed:[11509594](#), PubMed:[15383453](#)). Acts as a receptor for thrombospondin THBS1 and as modulator of integrin signaling through the activation of heterotrimeric G proteins (PubMed:[19004835](#), PubMed:[7691831](#), PubMed:[8550562](#)). Involved in signal transduction, cardiovascular homeostasis, inflammation, apoptosis, angiogenesis, cellular self-renewal, and immunoregulation (PubMed:[11509594](#), PubMed:[15383453](#), PubMed:[19004835](#), PubMed:[27742621](#), PubMed:[32679764](#), PubMed:[7691831](#), PubMed:[8550562](#)). Plays a role in modulating pulmonary endothelin EDN1 signaling (PubMed:[27742621](#)). Modulates nitrous oxide (NO) signaling, in response to THBS1, hence playing a role as a pressor agent, supporting blood pressure (By similarity). 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 (PubMed:[11509594](#)). Interaction with SIRPG mediates cell-cell adhesion, enhances superantigen-dependent T-cell-mediated proliferation and costimulates T-cell activation (PubMed:[15383453](#)). Positively modulates FAS-dependent apoptosis in T-cells, perhaps by enhancing FAS clustering (By similarity). Plays a role in suppressing angiogenesis and may be involved in metabolic dysregulation during normal aging (PubMed:[32679764](#)). In response to THBS1, negatively modulates wound healing (By similarity). Inhibits stem cell self-renewal, in response to THBS1, probably by regulation of the stem cell transcription factors POU5F1/OCT4, SOX2, MYC/c-Myc and KLF4 (By similarity). May play a role in membrane transport and/or integrin dependent signal transduction (PubMed:[7691831](#)). May prevent premature elimination of red blood cells (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein

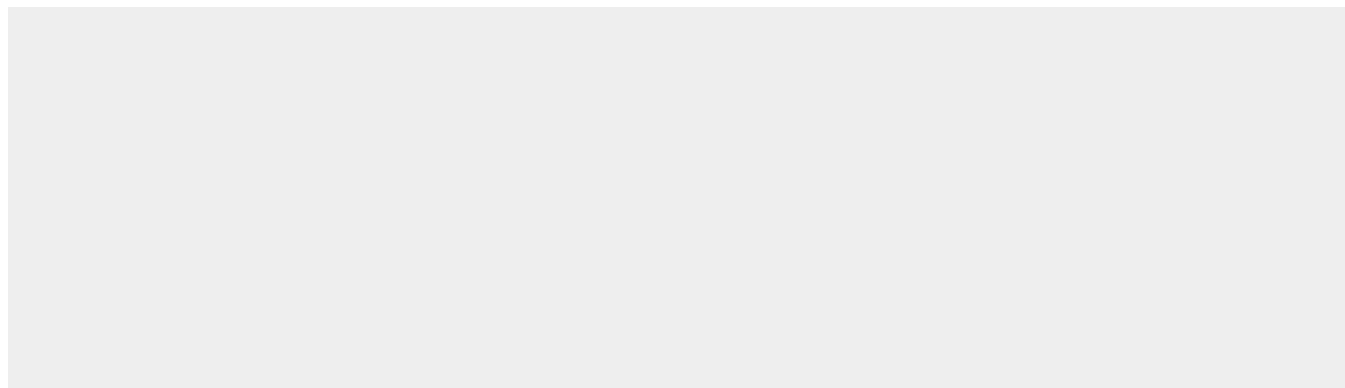
Tissue Location

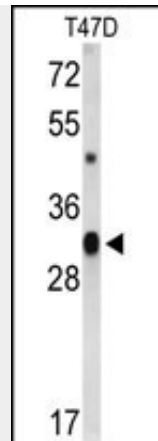
Very broadly distributed on normal adult tissues, as well as ovarian tumors, being especially abundant in some epithelia and the brain. Macrophages (PubMed:39121194)

CD47 Antibody (C-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](#)

CD47 Antibody (C-term) - Images



Western blot analysis of CD47 Antibody (C-term) (Cat. #AP9137b) in T47D cell line lysates (35ug/lane). CD47 (arrow) was detected using the purified Pab.

CD47 Antibody (C-term) - Background

CD47 antigen, also known as integrin associated protein (IAP), has a very broad tissue distribution. CD47 is expressed on all hematopoietic cells, including leukocytes, platelets and erythrocytes. It is also expressed on epithelial cells, endothelial cells, fibroblasts and many tumor cell lines. There are approximately 50,000 CD47 molecules per erythrocyte. The glycoprotein is deficient in erythrocytes of the rare Rh null phenotype. CD47 is a heavily N glycosylated cell membrane glycoprotein of apparent molecular weight 47-52 kDa. It may play a role as a signal transducer in the regulation of cation fluxes across cell membranes and in the chemotactic and adhesive interactions of leukocytes with endothelial cells.

CD47 Antibody (C-term) - References

Hatherley D., et.al., Mol. Cell 31:266-277(2008).
Wollscheid B., et.al., Nat. Biotechnol. 27:378-386(2009).