

# CD47 Polyclonal Antibody

Catalog # AP73692

## Product Information

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Application	WB, IHC-P
Primary Accession	<a href="#">Q08722</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35214

## Additional Information

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Gene ID	961
Other Names	CD47; MER6; Leukocyte surface antigen CD47; Antigenic surface determinant protein OA3; Integrin-associated protein; IAP; Protein MER6; CD47
Dilution	WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

## Protein Information

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Name	CD47
Synonyms	MER6
Function	<p>Adhesive protein that mediates cell-to-cell interactions (PubMed: <a href="#">11509594</a>, PubMed:<a href="#">15383453</a>). Acts as a receptor for thrombospondin THBS1 and as modulator of integrin signaling through the activation of heterotrimeric G proteins (PubMed:<a href="#">19004835</a>, PubMed:<a href="#">7691831</a>, PubMed:<a href="#">8550562</a>). Involved in signal transduction, cardiovascular homeostasis, inflammation, apoptosis, angiogenesis, cellular self-renewal, and immunoregulation (PubMed:<a href="#">11509594</a>, PubMed:<a href="#">15383453</a>, PubMed:<a href="#">19004835</a>, PubMed:<a href="#">27742621</a>, PubMed:<a href="#">32679764</a>, PubMed:<a href="#">7691831</a>, PubMed:<a href="#">8550562</a>). Plays a role in modulating pulmonary endothelin EDN1 signaling (PubMed:<a href="#">27742621</a>). 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:<a href="#">11509594</a>). Interaction with</p>

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

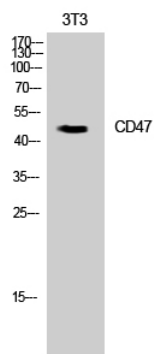
#### Tissue Location

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

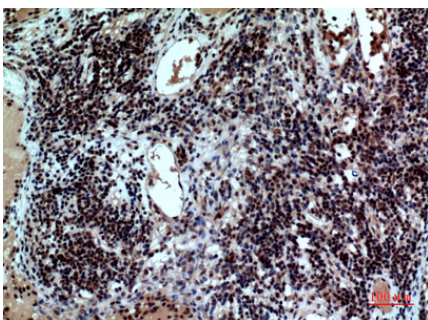
## Background

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.

## Images



Western Blot analysis of 3T3 cells using CD47 Polyclonal Antibody. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-Lymph-nodes, antibody was diluted at 1:100