

# Anti-CD47 Antibody

Rabbit polyclonal antibody to CD47

Catalog # AP61132

## Product Information

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Application	WB, IHC
Primary Accession	<a href="#">Q08722</a>
Other Accession	<a href="#">Q61735</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35214

## Additional Information

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Gene ID	961
Other Names	MER6; Leukocyte surface antigen CD47; Antigenic surface determinant protein OA3; Integrin-associated protein; IAP; Protein MER6; CD47
Target/Specificity	Recognizes endogenous levels of CD47 protein.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/50 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/50 - 1/200)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

## Protein Information

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Name	CD47
Synonyms	MER6
Function	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:[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

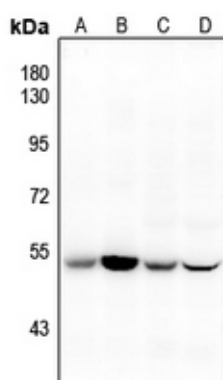
#### Tissue Location

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

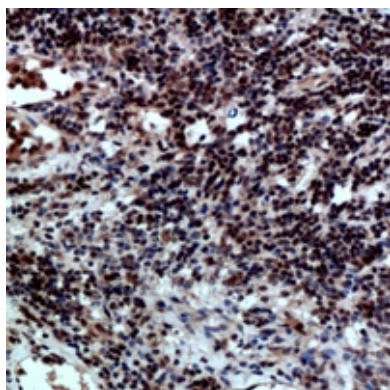
## Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CD47. The exact sequence is proprietary.

## Images



Western blot analysis of CD47 expression in rat testis (A), mouse kidney (B), rat brain (C), mouse brain (D) whole cell lysates.



Immunohistochemical analysis of CD47 staining in human lymph node formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.