

**CD47 Antibody (aa23-140)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS16247****Specification**

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**CD47 Antibody (aa23-140) - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">Q08722</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>35kDa KDa</b>

**CD47 Antibody (aa23-140) - 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**

Human CD47.

**Reconstitution & Storage**

Store at -20°C for up to one year.

**Precautions**

CD47 Antibody (aa23-140) is for research use only and not for use in diagnostic or therapeutic procedures.

**CD47 Antibody (aa23-140) - Protein Information****Name** CD47**Synonyms** MER6**Function**

Adhesive protein that mediates cell-to-cell interactions (PubMed:[11509594](http://www.uniprot.org/citations/11509594), PubMed:[15383453](http://www.uniprot.org/citations/15383453)). Acts as a receptor for thrombospondin THBS1 and as modulator of integrin signaling through the activation of heterotrimeric G proteins (PubMed:[19004835](http://www.uniprot.org/citations/19004835), PubMed:[7691831](http://www.uniprot.org/citations/7691831), PubMed:[8550562](http://www.uniprot.org/citations/8550562)). Involved in signal transduction, cardiovascular homeostasis, inflammation, apoptosis, angiogenesis, cellular self-renewal, and immunoregulation (PubMed:[11509594](http://www.uniprot.org/citations/11509594), PubMed:[11509594](http://www.uniprot.org/citations/11509594), PubMed:[11509594](http://www.uniprot.org/citations/11509594)).

<http://www.uniprot.org/citations/15383453> target="\_blank">15383453</a>, PubMed:<a href="http://www.uniprot.org/citations/19004835" target="\_blank">19004835</a>, PubMed:<a href="http://www.uniprot.org/citations/27742621" target="\_blank">27742621</a>, PubMed:<a href="http://www.uniprot.org/citations/32679764" target="\_blank">32679764</a>, PubMed:<a href="http://www.uniprot.org/citations/7691831" target="\_blank">7691831</a>, PubMed:<a href="http://www.uniprot.org/citations/8550562" target="\_blank">8550562</a>). Plays a role in modulating pulmonary endothelin EDN1 signaling (PubMed:<a href="http://www.uniprot.org/citations/27742621" target="\_blank">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="http://www.uniprot.org/citations/11509594" target="\_blank">11509594</a>). Interaction with SIRPG mediates cell-cell adhesion, enhances superantigen-dependent T-cell-mediated proliferation and costimulates T-cell activation (PubMed:<a href="http://www.uniprot.org/citations/15383453" target="\_blank">15383453</a>). 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:<a href="http://www.uniprot.org/citations/32679764" target="\_blank">32679764</a>). 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:<a href="http://www.uniprot.org/citations/7691831" target="\_blank">7691831</a>). 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

#### **Volume**

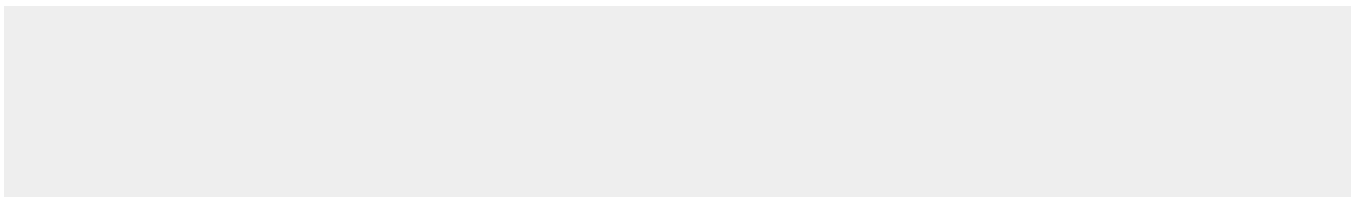
50 µl

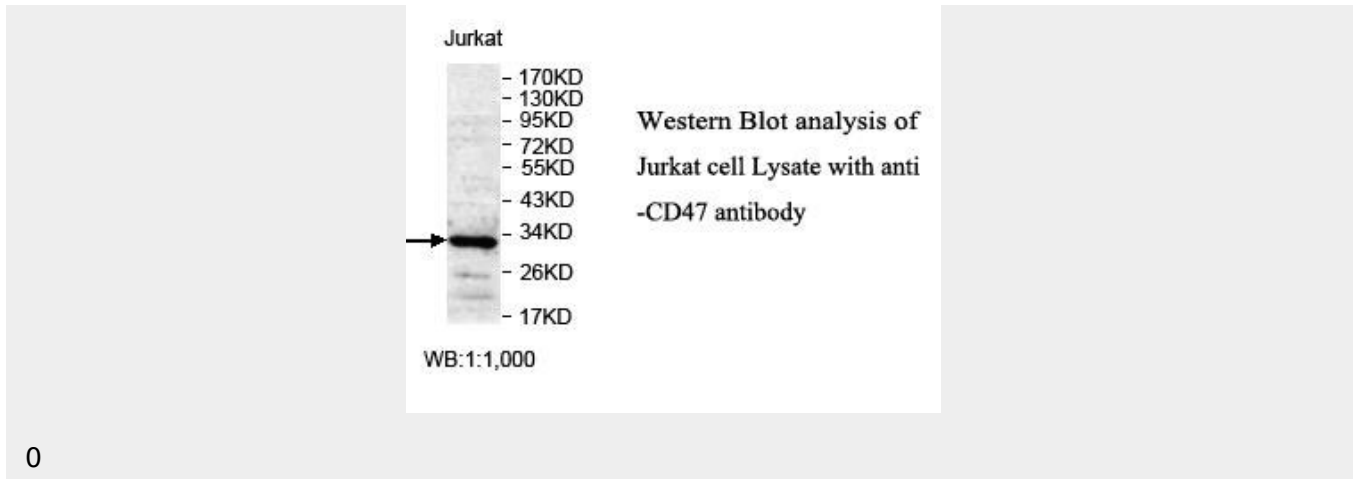
#### **CD47 Antibody (aa23-140) - Protocols**

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 (aa23-140) - Images**





### CD47 Antibody (aa23-140) - 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.

### CD47 Antibody (aa23-140) - References

- Campbell I.G., et al. *Cancer Res.* 52:5416-5420(1992).
- Lindberg F.P., et al. *J. Cell Biol.* 123:485-496(1993).
- Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
- Ota T., et al. *Nat. Genet.* 36:40-45(2004).
- Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.