

**Anti-CD47 Rabbit Monoclonal Antibody**  
Catalog # ABO13338**Specification****Anti-CD47 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IF, ICC, FC
Primary Accession	<a href="#">Q08722</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-CD47 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

**Anti-CD47 Rabbit Monoclonal Antibody - 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

**Calculated MW**

35214 MW KDa

**Application Details**

WB 1:1000-1:2000<br>ICC/IF 1:50-1:200<br>FC 1:50

**Subcellular Localization**

Cell membrane ; Multi-pass membrane protein.

**Tissue Specificity**

Very broadly distributed on normal adult tissues, as well as ovarian tumors, being especially abundant in some epithelia and the brain.

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human CD47

**Purification**

Affinity-chromatography

Storage

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for**

up to one month. Avoid repeated  
freeze-thaw cycles.

## Anti-CD47 Rabbit Monoclonal Antibody - Protein Information

**Name** CD47

**Synonyms** MER6

### Function

Adhesive protein that mediates cell-to-cell interactions (PubMed:<a href="http://www.uniprot.org/citations/11509594" target="\_blank">11509594</a>, PubMed:<a href="http://www.uniprot.org/citations/15383453" target="\_blank">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="http://www.uniprot.org/citations/19004835" target="\_blank">19004835</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>). Involved in signal transduction, cardiovascular homeostasis, inflammation, apoptosis, angiogenesis, cellular self-renewal, and immunoregulation (PubMed:<a href="http://www.uniprot.org/citations/11509594" target="\_blank">11509594</a>, PubMed:<a href="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

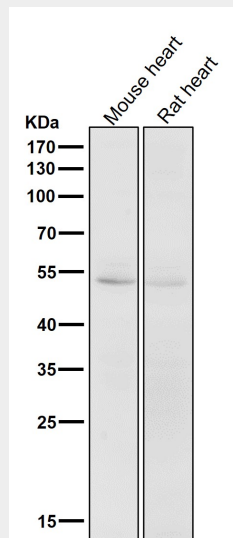
Very broadly distributed on normal adult tissues, as well as ovarian tumors, being especially abundant in some epithelia and the brain. Macrophages (PubMed:39121194)

## Anti-CD47 Rabbit Monoclonal Antibody - Protocols

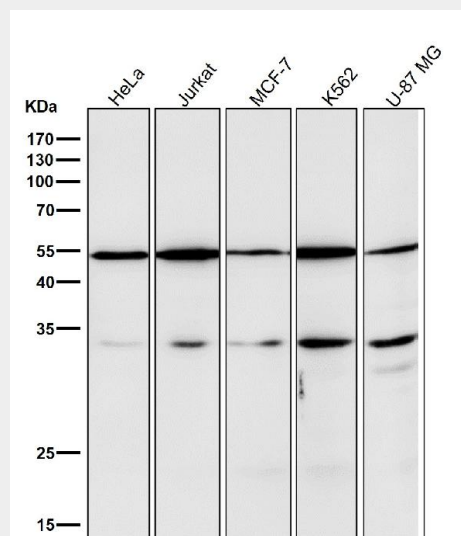
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

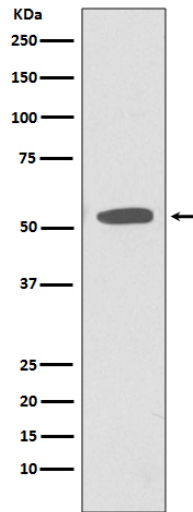
### Anti-CD47 Rabbit Monoclonal Antibody - Images



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



Western blot analysis of extracts of NIH/3T3 cell lysate, using CD47 antibody.