

## CD47 Rabbit mAb

Catalog # AP76921

## **Product Information**

**Application** WB, IF, FC, ICC

Primary Accession Q08722

**Reactivity** Rat, Human, Mouse

**Host** Rabbit

**Clonality** Monoclonal Antibody

**Isotype** IgG

**Conjugate** Unconjugated

**Immunogen** A synthesized peptide derived from human CD47

**Purification** Affinity Chromatography

Calculated MW 35214

## **Additional Information**

Gene ID 961

Other Names CD47

**Dilution** WB~~1/500-1/1000 IF~~1:50~200 FC~~1:10~50 ICC~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

## **Protein Information**

Name CD47

Synonyms MER6

**Function** Adhesive protein that mediates cell-to-cell interactions (PubMed: <u>11509594</u>,

PubMed:<u>15383453</u>). Acts as a receptor for thrombospondin THBS1 and as modulator of integrin signaling through the activation of heterotrimeric G proteins (PubMed:<u>19004835</u>, PubMed:<u>7691831</u>, PubMed:<u>8550562</u>). 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:<u>27742621</u>). 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)

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