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CD47/MER6 Polyclonal Antibody
Rabbit Anti Human Polyclonal Antibody
Catalog # ABV11723

Specification

CD47/MER6 Polyclonal Antibody - Product Information

Application	**FC, IHC**
Primary Accession	Q08722
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**35214**

CD47/MER6 Polyclonal Antibody - Additional Information

Gene ID 961

Positive Control	**IHC, FC**
Application & Usage	**IHC-P~~1:100~1:500 FC~~1:20~1:100**

Other Names
IAP; OA3; MER6; Leukocyte surface antigen CD47; Antigenic surface determinant protein OA3; Integrin-associated protein; Protein MER6; CD47

Target/Specificity
CD47

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glycerol

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
CD47/MER6 Polyclonal Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CD47/MER6 Polyclonal Antibody - Protein Information

Name CD47

Synonyms MER6

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

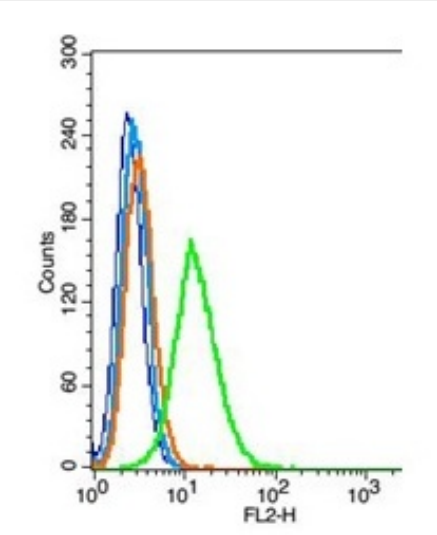
CD47/MER6 Polyclonal Antibody - Protocols

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

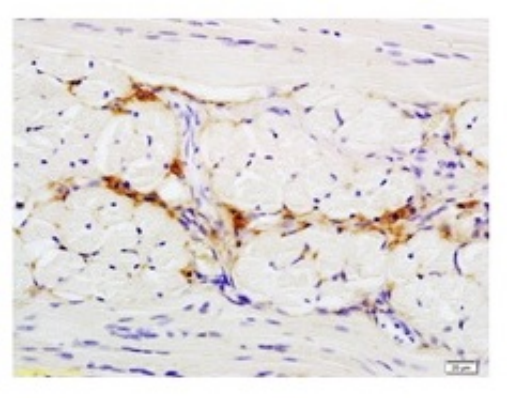
- Western Blot

- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CD47/MER6 Polyclonal Antibody - Images



RSC96 cells probed with CD47 polyclonal antibody, Unconjugated at 1:100 for 30 minutes followed by incubation with a PE conjugated secondary(green) for 30 minutes compared to control cells(blue), secondary only(light blue) and isotype control(organge).



Formalin-fixed and paraffin embedded Rat tongue tissue labeled with anti-CD47 polyclonal antibody.

CD47/MER6 Polyclonal Antibody - 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.