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CD47/MER6 Polyclonal Antibody

Rabbit Anti Human Polyclonal Antibody
Catalog # ABV11723

Product Information

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

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.

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:7691831, PubMed:8550562). 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: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

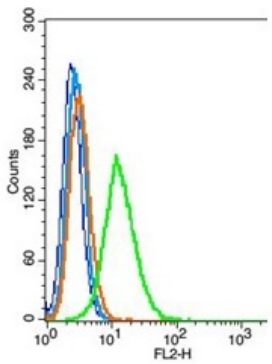
Tissue Location

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

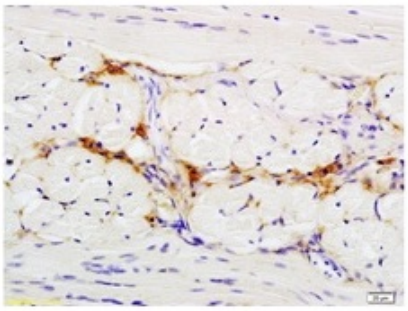
Background

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.

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.