

Goat Anti-CD47 Antibody (internal region (near C terminus)) Purified Goat Polyclonal Antibody Catalog # AF4164a

Specification

Goat Anti-CD47 Antibody (internal region (near C terminus)) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Calculated MW WB <u>Q08722</u> <u>NP_001768.1</u>, <u>NP_942088.1</u> Human Human, Dog Goat Polyclonal 0.5 35214

Goat Anti-CD47 Antibody (internal region (near C terminus)) - Additional Information

Gene ID 961

Other Names

CD47; CD47 molecule; IAP; MER6; OA3; CD47 antigen (Rh-related antigen, integrin-associated signal transducer); CD47 glycoprotein; Rh-related antigen; antigen identified by monoclonal antibody 1D8; antigenic surface determinant protein OA3; integrin associ

Format

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Immunogen

Peptide with sequence C-SNQKTIQPPRK, from the internal region (near C terminus) of the protein sequence according to NP_001768.1; NP_942088.1.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-CD47 Antibody (internal region (near C terminus)) is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-CD47 Antibody (internal region (near C terminus)) - 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)

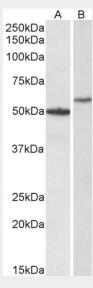
Goat Anti-CD47 Antibody (internal region (near C terminus)) - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety



• <u>Cell Culture</u> Goat Anti-CD47 Antibody (internal region (near C terminus)) - Images



AF4164a (0.3 μ g/ml) staining of Human Hippocampus (A) and HeLa (B) lysates (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-CD47 Antibody (internal region (near C terminus)) - References

Endothelial CD47 promotes vascular endothelial-cadherin tyrosine phosphorylation and participates in T cell recruitment at sites of inflammation in vivo. Azcutia V, Stefanidakis M, Tsuboi N, Mayadas T, Croce KJ, Fukuda D, Aikawa M, Newton G, Luscinskas FW. Journal of immunology (Baltimore, Md. : 1950) 2012 Sep 189 (5): 2553-62.