

Anti-CD47 [mIAP301] Standard Size Ab01569-7.1

Isotype and Format: Rat IgG2a, Kappa

Clone Number: mIAP301

Alternative Name(s) of Target: IAP; Leukocyte surface antigen CD47; Integrin-associated protein; integrin associated protein; MIAP 301; MIAP-301

UniProt Accession Number of Target Protein: Q61735

Published Application(s): IP, WB, Block, FC, IF

Published Species Reactivity: Mouse

Immunogen: MIAP301 was prepared by immunizing rats with intact CD47 purified from mouse placenta.

Specificity: MIAP301 binds specifically to the extracellular domain of CD47 (exon 2 that encodes both the predicted signal peptide cleavage site and the entire Ig domain). CD47 plays a role in cell adhesion by acting as an adhesion receptor for THBS1 on platelets and in (beta-3) integrin modulation. Functions as a SIRPA receptor - binding prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells. CD47 also interacts with SIRPG which mediates cell-cell adhesion, enhances superantigen-dependent T-cell-mediated proliferation and costimulates T-cell activation. Plays an important role in memory formation and synaptic plasticity in the hippocampus.

Application Notes: MIAP301 can block murine CD47 interactions with SIRP α and functionally blocks CD47 in vivo in murine soft tissue ischemia and skin graft models (Soto-Pantoja et al. 2012). This antibody has also been used for FC (Olsson et al. Blood. 2005 May 1; 105(9): 3577–3582.). MIAP301 has also been shown to block KCl-evoked glutamate release from the hippocampus in mice, inhibiting glutamate release and thus impair memory retention (Chang et al. 2001).

Antibody First Published in: Lindberg et al. Decreased Resistance to Bacterial Infection and Granulocyte Defects in IAP-Deficient Mice Science. 1996 Nov 1;274(5288):795-8. [PMID:8864123](#)

Note on publication: Describes the use of MIAP301 in determining CD47 tissue distribution and to ensure no functional fragment of CD47 was expressed in CD47 $-/-$ KO mice.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -

20°C.

Concentration: 1 mg/ml.

Important note - This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.