

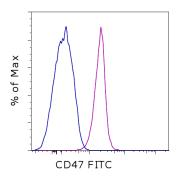
An Affymetrix Company

# **Anti-Mouse CD47 APC**

Catalog Number: 17-0471

Also known as: Integrin associated protein, IAP

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of C57BL/6 splenocytes with 0.5 ug of Rat IgG2a kappa Isotype Control APC (cat. 17-4321) (blue histogram) or 0.5 ug of Anti-Mouse CD47 APC (purple histogram). Total viable cells were used for analysis.

#### **Product Information**

Contents: Anti-Mouse CD47 APC

REF

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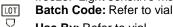
Clone: miap301

Concentration: 0.2 mg/mL Host/Isotype: Rat IgG2a, kappa



**Formulation:** aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer **Temperature Limitation:** Store at 2-8°C. Do not

freeze. Light sensitive material.



Use By: Refer to vial
Caution, contains Azide



## Description

The monoclonal antibody miap301 reacts to CD47 also known as integrin-associated protein (IAP), and neurophilin. CD47 is a glycosylated five transmembrane protein with a small cytoplasmic domain. CD47 is involved in adhesion through interactions with SIRP (signal regulator protein) and is non-covalently associated with \( \mathbb{B} \)3 integrins CD51/CD61, CD41/CD61. It is also known to be the receptor for thrombospondin. T cell expression of CD47 can mediate activation or apoptosis (in the presence of high levels of thrombospondin). Expression is found in the majority of hematopoietic cells including T and B cells, monocytes, platelets and erythrocytes (as part of the Rh complex). Expression is also found in non-hematopoietic cells.

No crossreactivity is seen against human CD47.

#### **Applications Reported**

This miap301 antibody has been reported for use in flow cytometric analysis.

# **Applications Tested**

This miap301 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 1  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

Chang HP, Ma YL, Wan FJ, Tsai LY, Lindberg FP, Lee EH. Functional blocking of integrin-associated protein impairs memory retention and decreases glutamate release from the hippocampus. Neuroscience. 2001;102(2):289-96

Babic I, Schallhorn A, Lindberg FP, Jirik FR. SHPS-1 induces aggregation of Ba/F3 pro-B cells via an interaction with CD47. J Immunol. 2000 Apr 1;164(7):3652-8. (miap301, FA (blocking cell aggregation in vitro), PubMed)

Jiang P, Lagenaur CF, Narayanan V. Integrin-associated protein is a ligand for the P84 neural adhesion molecule. J



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Biol Chem. 1999 Jan 8;274(2):559-62.

Mouro-Chanteloup I, Delaunay J, et al. 2003. Evidence that the red cell skeleton protein 4.2 interacts with the Rh membrane complex member CD47. Blood 101(1):338-44. (miap301, WB, PubMed)

Chang HP, Lindberg FP, et al. 1999. Impaired memory retention and decreased long-term potentiation in integrin-associated protein-deficient mice. (miap301, WB, PubMed)

#### **Related Products**

17-4321 Rat IgG2a K Isotype Control APC (eBR2a)