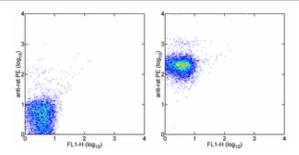


# Anti-Mouse CD47 Purified

Catalog Number: 14-0471

Also Known As:Integrin associated protein, IAP

RUO: For Research Use Only



Staining of BALB/c splenocytes with 0.25  $\mu g$  of Rat IgG2a Isotype Control Purified (cat. 14-4321) (left) or 0.25  $\mu g$  of Anti-Mouse CD47 Purified (right) followed by Anti-Rat IgG PE (cat. 12-4822). Total viable cells were used for analysis.

## **Product Information**

Contents: Anti-Mouse CD47 Purified

REF Catalog Number: 14-0471

Clone: miap301

Concentration: 0.5 mg/ml Host/Isotype: Rat IgG2a, κ Formulation: aqueous buffer, 0.09% sodium azide, may contain

carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C.

LOT Batch Code: Refer to Vial

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 \( \mathbb{G} \) 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, immunoprecipitation, immunoblotting (WB) under nonreducing conditions, and immunohistology staining of frozen tissue sections.

#### **Applications Tested**

This miap 30 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.5  $\mu$ 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 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)

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mice. (miap301, WB, PubMed)

**Related Products** 

11-4317 Streptavidin FITC

11-4811 Anti-Rat IgG FITC

12-4317 Streptavidin PE

13-4813 Anti-Rat IgG Biotin (Polyclonal)

14-4321 Rat IgG2a K Isotype Control Purified

17-4317 Streptavidin APC

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