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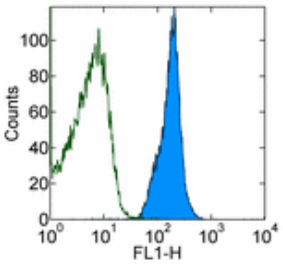
Anti-Mouse CD47 FITC

Catalog Number: 11-0471
Also Known As:Integrin associated protein, IAP
RUO: For Research Use Only



Staining of BALB/c splenocytes with 0.5 µg of Rat IgG2a κ Isotype Control FITC (cat. 11-4321) (open histogram) or 0.5 µg of Anti-Mouse CD47 FITC (filled histogram). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse CD47 FITC
REF Catalog Number: 11-0471
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. Do not freeze. Light sensitive material.
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 ß3 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 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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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)

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
11-4321 Rat IgG2a K Isotype Control FITC