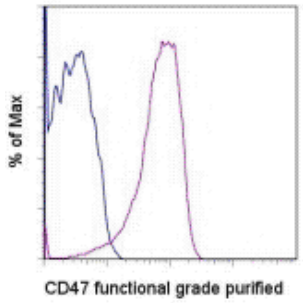
full spectrum cell analysis®
eBioscience®

Anti-Human CD47 Functional Grade Purified

Catalog Number: 16-0479
Also Known As: Integrin associated protein, IAP
RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of normal human peripheral blood cells with 0.5 ug of Mouse IgG1 kappa Isotype Control Functional Grade Purified (cat. 16-4714) (blue histogram) or 0.5 ug of Anti-Human CD47 Functional Grade Purified (purple histogram) followed by Anti-Mouse IgG FITC (cat. 11-4011). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Human CD47 Functional Grade Purified
REF **Catalog Number:** 16-0479
Clone: B6H12
Concentration: 1 mg/mL
Host/Isotype: Mouse IgG1, kappa
Handling Conditions: Use in sterile environment.
Endotoxin Level: Less than 0.001 ng/ug antibody, as determined by the LAL assay.

Formulation: aqueous buffer, no sodium azide
Temperature Limitation: Store at 2-8°C.
LOT **Batch Code:** Refer to Vial
Use By: Refer to Vial

Description

The monoclonal antibody B6H12 reacts to CD47 also known as integrin-associated protein (IAP), and neurophilin. CD47 is a glycosylated five transmembrane protein with a small alternatively spliced cytoplasmic domain. CD47 is involved in adhesion through interactions with SIRP (signal regulator protein) and is non-covalently associated with β3 integrins CD51/CD61 and CD41/CD61. Furthermore this interaction can mediate bi-directional signaling to modify neural synaptic activity and regulate the phagocytic activities of macrophages. CD47 is the receptor for thrombospondin. T cell expression of CD47 can mediate activation or apoptosis (in the presence of high levels of thrombospondin). Recently stimulation of CD47 by monoclonal antibody has been shown to induce CD4+CD25- suppressive activity also increasing expression of Foxp3. 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.

This antibody has been reported to have neutralizing activity.

Applications Reported

This B6H12 antibody has been reported for use in flow cytometric analysis and neutralizing assays.

Applications Tested

This B6H12 antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. 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

Grimbert P, Bouguermouh S, Baba N, Nakajima T, Allakhverdi Z, Braun D, Saito H, Rubio M, Delespesse G, Sarfati M. Thrombospondin/CD47 interaction: a pathway to generate regulatory T cells from human CD4+ CD25- T cells in response to inflammation. J Immunol. 2006 Sep 15;177(6):3534-41. (B6H12, FA)

Lagadec P, Dejoux O, Ticchioni M, Cottrez F, Johansen M, Brown EJ, Bernard A. Involvement of a CD47-dependent pathway in platelet adhesion on inflamed vascular endothelium under flow. Blood. 2003 Jun 15;101(12):4836-43.(B6H12, FA)

Brown E, Hooper L, Ho T, Gresham H. Integrin-associated protein: a 50-kD plasma membrane antigen physically and functionally

associated with integrins. J Cell Biol. 1990 Dec;111(6 Pt 1):2785-94. (B6H12, WB)

Gresham HD, Goodwin JL, Allen PM, Anderson DC, Brown EJ.A novel member of the integrin receptor family mediates Arg-Gly-Asp-stimulated neutrophil phagocytosis. J Cell Biol. 1989 May;108(5):1935-43.

Related Products
11-4011 Anti-Mouse IgG FITC
16-4714 Mouse IgG1 K Isotype Control Functional Grade Purified (P3.6.2.1)

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com