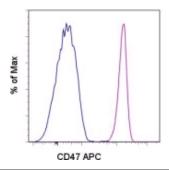


## Anti-Human CD47 APC

Catalog Number: 17-0479

Also Known As:Integrin associated protein, IAP

RUO: For Research Use Only



Staining of normal human peripheral blood cells with Mouse IgG1  $\kappa$  Isotype Control APC (cat. 17-4714) (blue histogram) or Anti-Human CD47 APC (purple histogram). Cells in the lymphocyte gate were used for analysis.

#### **Product Information**

Contents: Anti-Human CD47 APC

REF Catalog Number: 17-0479

Clone: B6H12

Concentration: 5 μl (1 μg)/test Host/Isotype: Mouse IgG1, 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.

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.

## Applications Tested

This B6H12 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5  $\mu$ l (1  $\mu$ g)/per test. A test is defined as the amount ( $\mu$ g)/test 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.

### References

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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.

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