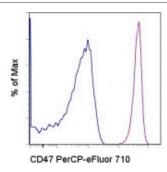


# Anti-Human CD47 PerCP-eFluor® 710

Catalog Number: 46-0479

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 Mouse IgG1 K Isotype Control PerCP-eFluor® 710 (cat. 46-4714) (blue histogram) or Anti-Human CD47 PerCP-eFluor® 710 (purple histogram). Cells in the lymphocyte gate were used for analysis.

#### **Product Information**

Contents: Anti-Human CD47 PerCP-eFluor® 710

REF Catalog Number: 46-0479

Clone: B6H12

Concentration: 5 uL (0.5 ug)/test Host/Isotype: Mouse IgG1, 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.

LOT Batch Code: Refer to Vial Use By: Refer to Vial

Contains sodium azide

## 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 μL (0.5 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.

PerCP-eFluor® 710 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 uL cell sample + 100 uL IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

#### 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**

46-4714 Mouse IgG1 K Isotype Control PerCP-eFluor® 710 (P3.6.2.8.1)

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