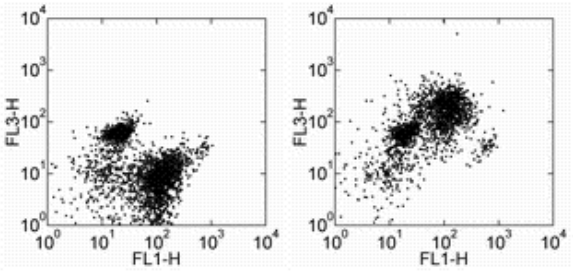
Anti-Mouse CD93 (AA4.1) PE-Cyanine7

Catalog Number: 25-5892
Also Known As:C1qRp, Early B lineage antigen
RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of C57BL/6 bone marrow cells with Anti-Human/Mouse CD45R (B220) FITC (cat. 11-0452) and 0.125 ug of Rat IgG2b K Isotype Control PE-Cyanine7 (cat. 25-4031) (left) or 0.125 ug of CD93 (AA4.1) PE-Cyanine7 (right). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse CD93 (AA4.1) PE-Cyanine7
REF **Catalog Number:** 25-5892
Clone: AA4.1
Concentration: 0.2 mg/mL
Host/Isotype: Rat IgG2b, 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. This tandem dye is sensitive to photo-induced oxidation. Protect this vial from light during storage, handling & experimental procedures.
LOT **Batch Code:** Refer to Vial
Use By: Refer to Vial
Contains sodium azide

Description

The AA4.1 monoclonal antibody reacts with mouse C1qRp, an approximately 130-140 kDa C-type lectin-like type I transmembrane protein. The AA4.1 antigen was originally identified as an antigen expressed on early stages of B cell development in bone marrow. Adult spleen and fetal liver also have detectable numbers of AA4.1 positive cells. In combination with other markers of hematopoietic progenitor cells such as Thy-1, Sca-1, c-Kit, CD43, and CD24, the bone marrow Lymphoid-Committed Progenitors (CLP) can be segregated into more primitive and more differentiated subsets based on expression of AA4.1. Correlated expression of surface IgM (sIgM), CD23, and AA4.1 antigen has also been used to define three nonproliferative subpopulations of immature/transitional peripheral B cells designated: T1 (AA4.1+/CD23-/sIgMhi), T2 (AA4.1+/CD23+/sIgMhi), and T3 (AA4.1+/CD23+/sIgMlo). AA4.1 is also reported to be expressed in cytoplasmic vesicles in endothelial cells, megakaryoblasts, and platelets. It is reported that monoclonal antibodies AA4.1 and 493 recognize different epitopes of the same molecule.

Applications Reported

This AA4.1 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This AA4.1 antibody has been tested by flow cytometric analysis of mouse bone marrow and splenocyte cell suspensions. This can be used at less than or equal to 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

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

Dean YD, McGreal EP, Akatsu H, Gasque P. 2000 Molecular and cellular properties of the rat AA4 antigen, a C-type lectin-like receptor with structural homology to thrombomodulin. J Biol Chem. Nov 3;275(44):34382-92.

McKearn JP, Baum C, Davie JM. 1984 Cell surface antigens expressed by subsets of pre-B cells and B cells. J Immunol. Jan;132(1):332-9.

Related Products

11-0452 Anti-Human/Mouse CD45R (B220) FITC (RA3-6B2)

25-4031 Rat IgG2b K Isotype Control PE-Cyanine7

Legal

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