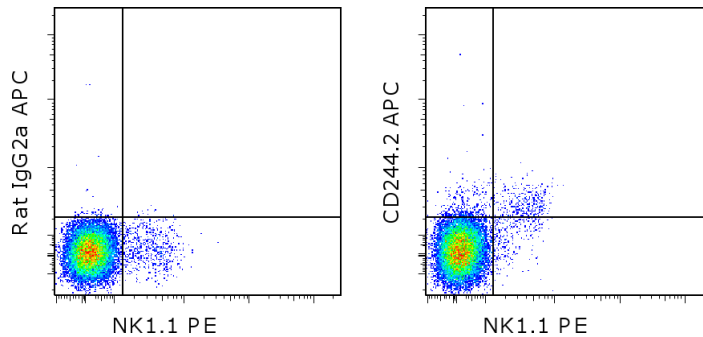


Anti-Mouse CD244.2 (2B4) APC

Catalog Number: 17-2441

Also known as: B6 Alloantigen

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of C57Bl/6 splenocytes with Anti-Mouse NK1.1 PE (cat. 12-5941) and 0.125 ug of Rat IgG2a K Isotype Control APC (cat. 17-4321) (left) or 0.125 ug of Anti-Mouse CD244.2 APC (right). Total viable cells were used for analysis.

Product Information



Contents: Anti-Mouse CD244.2 (2B4) APC

Catalog Number: 17-2441

Clone: eBio244F4

Concentration: 0.2 mg/mL

Host/Isotype: Rat IgG2a



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

Mouse CD244, also known as 2B4, is a receptor belonging to the CD2 family of proteins involved in non-MHC dependent cytotoxicity. Expression is found on natural killer (NK) cells and many NKT cells and CD8+ cells. In C57BL/6 mice, two splice variants exist that differ in the length of the cytoplasmic domain. The long form functions in an inhibitory manner through signaling through SHP-2, while the short form functions in an activating manner. The ligand for CD244 is CD48 which is expressed on all hematopoietic cells. Recent data suggests that CD244 interactions with CD48, but not CD2 interaction with CD48, is essential for IL-2-driven expansion and activation of murine NK cells.

Reports show CD244 expression can discriminate hematopoietic progenitors. Hematopoietic stem cells (HSC) are highly purified as CD150+CD244-CD48- cells while non-self-renewing multipotent hematopoietic progenitors (MPP) are CD244+CD150-CD48- and the most restricted progenitors are CD48+CD244+CD150-.

eBio244F4 was generated against cell lines expressing CD244. It reacts with the C57BL/6 but not Balb/c due to polymorphisms present in the immunoglobulin V domain of the protein. The epitope recognized by eBio244F4 is different from that of 2B4; therefore these antibodies do not cross-block the binding to the respective epitopes.

Applications Reported

This 244F4 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 244F4 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.25 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Zelinskyy G, Myers L, Dietze KK, Gibbert K, Roggendorf M, Liu J, Lu M, Kraft AR, Teichgräber V, Hasenkrug KJ,

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Dittmer U. Virus-specific CD8+ T cells upregulate programmed death-1 expression during acute friend retrovirus infection but are highly cytotoxic and control virus replication. *J Immunol.* 2011 Oct 1;187(7):3730-7. (ebio244F4, FC)

Lee KM, Forman JP, McNerney ME, Stepp S, Kuppireddi S, Guzior D, Latchman YE, Sayegh MH, Yagita H, Park CK, Oh SB, Wulfig C, Schatzle J, Mathew PA, Sharpe AH, Kumar V. Requirement of homotypic NK-cell interactions through 2B4 (CD244)/CD48 in the generation of NK effector functions. *Blood.* 2006 Apr 15;107(8):3181-8.

Kumaresan PR, Huynh VT, Mathew PA. Polymorphism in the 2B4 gene of inbred mouse strains. *Immunogenetics.* 2000 Jul;51(8-9):758-61

Mathew PA, Garni-Wagner BA, Land K, Takashima A, Stoneman E, Bennett M, Kumar V. Cloning and characterization of the 2B4 gene encoding a molecule associated with non-MHC-restricted killing mediated by activated natural killer cells and T cells. *J Immunol.* 1993 Nov 15;151(10):5328-37.

Garni-Wagner BA, Purohit A, Mathew PA, Bennett M, Kumar V. A novel function-associated molecule related to non-MHC-restricted cytotoxicity mediated by activated natural killer cells and T cells. *J Immunol.* 1993 Jul 1;151(1):60-70

Related Products

12-5941 Anti-Mouse NK1.1 PE (PK136)

12-5971 Anti-Mouse CD49b (Integrin alpha 2) PE (DX5)

17-4321 Rat IgG2a K Isotype Control APC (eBR2a)