

Anti-Mouse CD202b (TIE2) Functional Grade Purified

Catalog Number: 16-5987 Also Known As:TIE-2, TEK, CD202 RUO: For Research Use Only



Product Information

Description

The TEK4 monoclonal antibody reacts with mouse Tie-2, also known as CD202. A member of the tyrosine kinase receptor family, Tie-2 is expressed on endothelial and a subset of hematopoietic cells and is believed to play a role in both angiogenesis and hematopoiesis during development of the mouse embryo. In fetal liver and adult bone marrow, Tie-2 is expressed by a subpopulation of hematopoietic progenitor cells characterized as Lineage markers⁻, c-Kit⁺, Sca1⁺ cells. Long-term multilineage repopulating cells were detected in Tie-2⁺, Lineage⁻, c-Kit⁺, Sca1⁺ cells but not in Tie-2⁻, Lineage⁻, c-Kit⁺, Sca1⁺ cells.

Staining of mouse bone marrow with Anti-Mouse CD202b (TEK4) PE and Anti-Mouse Ly-6A/E (Sca-1) APC (cat. 17-5981) + Anti-Mouse CD117 (c-kit) APC (cat. 17-1171). Total viable lineage

negative cells were used for analysis.

Applications Reported

The TEK4 antibody has been reported for use in flow cytometric analysis.

Applications Tested

The TEK4 antibody has been tested by blocking of staining with fluorochrome conjugated TEK4 on mouse bone marrow cells. This can be used at less than or equal to 1 μ g per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. 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

Tang Y, Borgstrom P, Maynard J, Koziol J, Hu Z, Garen A, Deisseroth A. Mapping of angiogenic markers for targeting of vectors to tumor vascular endothelial cells. Cancer Gene Ther. 2007 Apr;14(4):346-53. (**TEK4**, IHC frozen, PubMed)

Lelievre E, Bourbon PM, Duan LJ, Nussbaum RL, Fong GH. Deficiency in the p110alpha subunit of PI3K results in diminished Tie2 expression and Tie2(-/-)-like vascular defects in mice. Blood. 2005 May 15;105(10):3935-8. (**TEK4**, IHC, PubMed)

Kolatsi-Joannou M, Li XZ, Suda T, Yuan HT, Woolf AS. Expression and potential role of angiopoietins and Tie-2 in early development of the mouse metanephros. Dev Dyn. 2001 Sep;222(1):120-6.

Hsu HC, Ema H, Osawa M, Nakamura Y, Suda T, Nakauchi H. Hematopoietic stem cells express Tie-2 receptor in the murine fetal liver. Blood. 2000 Dec 1;96(12):3757-62.

Hamaguchi I, Huang XL, Takakura N, Tada J, Yamaguchi Y, Kodama H, Suda T. In vitro hematopoietic and endothelial cell development from cells expressing TEK receptor in murine aorta-gonad-mesonephros region. Blood. 1999 Mar 1;93(5):1549-56.

Yano M, Iwama A, Nishio H, Suda J, Takada G, Suda T. Expression and function of murine receptor tyrosine kinases, TIE and TEK, in hematopoietic stem cells. Blood. 1997 Jun 15;89(12):4317-26.

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