

Anti-Human CD122 PerCP-eFluor® 710

Catalog Number: 46-1229 Also known as: IL-2 Receptor beta RUO: For Research Use Only. Not for use in diagnostic procedures.





Description

This 9A2-CD122 monoclonal antibody reacts with human CD122, which is also known as interleukin-2 receptor beta (IL-2R beta). This receptor is expressed on NK cells, activated T cells, some B cells, monocytes, and T cell leukemias. CD122 can also be detected during early NK cell commitment. IL-2R beta associates with the IL-2R alpha (CD25) or IL-15R alpha and common gamma chain (CD132) to form the high affinity IL-2 and IL-15 receptors, respectively. By itself, this membrane receptor can bind IL-2, but with intermediate affinity. The binding of IL-2 results in internalization of the cytokine, tyrosine phosphorylation of IL-2R β , and activation of signaling cascades such as the JAK/STAT pathway.

Applications Reported

This 9A2-CD122 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 9A2-CD122 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 μ L (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.

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.



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References

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Hatakeyama M, Tsudo M, Minamoto S, Kono T, Doi T, Miyata T, Miyasaka M, Taniguchi T. Interleukin-2 receptor beta chain gene: generation of three receptor forms by cloned human alpha and beta chain cDNA's. Science. 1989 May 5;244(4904):551-6.

Sharon M, Klausner RD, Cullen BR, Chizzonite R, Leonard WJ. Novel interleukin-2 receptor subunit detected by cross-linking under high-affinity conditions. Science. 1986 Nov 14;234(4778):859-63.

Related Products

17-0567 Anti-Human CD56 (NCAM) APC (CMSSB) 46-4724 Mouse IgG2a K Isotype Control PerCP-eFluor® 710