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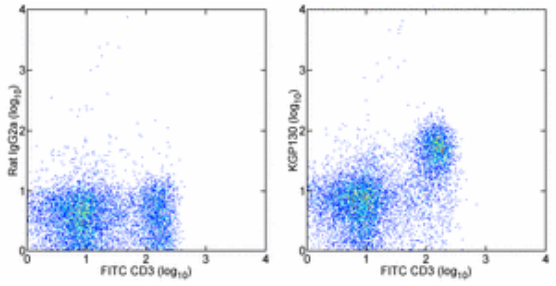
Anti-Mouse CD130 Purified

Catalog Number: 14-1302
Also Known As:gp130, IL-6 Receptor beta, IL-6RB
RUO: For Research Use Only



Staining of BALB/c splenocytes with Anti-Mouse CD3e FITC (cat. 11-0031) and 0.125 µg of Rat IgG2a κ Isotype Control Purified (cat. 14-4321) (left) or 0.125 µg of Anti-Mouse CD130 Purified (right) followed by F(ab')2 Anti-Rat IgG PE (cat. 12-4822). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Mouse CD130 Purified
REF Catalog Number: 14-1302
Clone: KGP130
Concentration: 0.5 mg/ml
Host/Isotype: Rat IgG2a, κ

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C.
LOT Batch Code: Refer to Vial
Use By: Refer to Vial
Caution, contains Azide

Description

The KGP130 monoclonal antibody reacts with mouse gp130, also known as CD130. gp130 is a 130 kD Type-I transmembrane glycoprotein containing a 597 amino acid extracellular domain, a single transmembrane domain, and a 277 amino acid cytoplasmic domain. gp130 is a subunit of several heterodimeric cell-surface receptors, including receptors for IL-6, IL-11, IL-27, Oncostatin M, and Leukemia Inhibitory Factor (LIF). The gp130 protein has also been found to exist in a soluble form, which is capable of inhibiting IL-6 signaling. gp130 is expressed mainly on T cells, monocytes, endothelial cells, activated B cells, and plasma cells, and is expressed at lower levels on most leukocytes and epithelial cells. In response to ligand binding, gp130 becomes tyrosine phosphorylated, leading to activation of several signaling pathways including the PI3 kinase, Ras-MAPk and Stat pathways.

Preincubation of mouse splenic T cells with IL-6 is capable of blocking the interaction of KGP130 with gp130, suggesting that the KGP130 binding site lies near the IL-6 interaction domain. Reactivity of KGP130 towards human gp130 has not been observed.

Applications Reported

This KGP130 antibody has been reported for use in flow cytometric analysis. The KGP130 antibody has also been found useful for immunoblotting, recognizing a protein of approximately 130 kD under non-reducing conditions.

Applications Tested

This KGP130 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Arzt E. gp130 cytokine signaling in the pituitary gland: a paradigm for cytokine-neuro-endocrine pathways. J Clin Invest. 2001 Dec;108 (12):1729-33. (PubMed)

Bravo J, Heath JK. Receptor recognition by gp130 cytokines. EMBO J. 2000 Jun 1;19(11):2399-411. (PubMed)

Wang XJ, Taga T, Yoshida K, Saito M, Kishimoto T, Kikutani H. gp130, the cytokine common signal-transducer of interleukin-6 cytokine family, is downregulated in T cells in vivo by interleukin-6. Blood. 1998 May 1;91(9):3308-14. (PubMed)

Related Products

11-4317 Streptavidin FITC
12-4317 Streptavidin PE

13-4813 Anti-Rat IgG Biotin (Polyclonal)
14-4321 Rat IgG2a K Isotype Control Purified
17-4317 Streptavidin APC
25-4317 Streptavidin PE-Cy7

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