full spectrum cell analysis®
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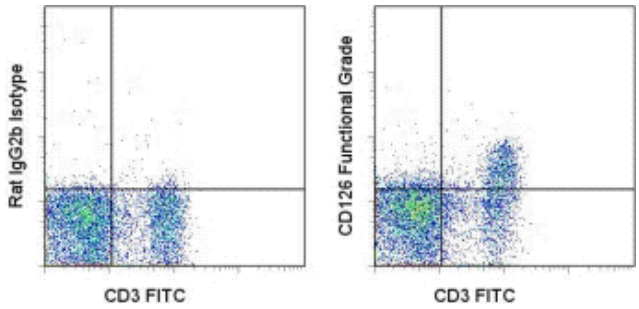
Anti-Mouse CD126 Functional Grade Purified

Catalog Number: 16-1261
Also Known As: Interleukin-6 Receptor alpha, IL-6Ra
RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of C57Bl/6 splenocytes with Anti-Mouse CD3e FITC (cat. 11-0031) and 0.5 ug of Rat IgG2b kappa Isotype Control Purifiedl (cat. 14-4031) (left) or 0.5 ug of Anti-Mouse CD126 Functional Grade Purified (right) followed by Anti-Rat IgG Biotin (cat. 13-4813) and Streptavidin PE (cat. 12-4317). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse CD126 Functional Grade Purified
REF **Catalog Number:** 16-1261
Clone: D7715A7
Concentration: 1 mg/mL
Host/Isotype: Rat IgG2b
Handling Conditions: Use in sterile environment.
Endotoxin Level: Less than 0.001 ng/ug antibody, as determined by the LAL assay.

Formulation: aqueous buffer, no sodium azide
Temperature Limitation: Store at 2-8°C.
LOT **Batch Code:** Refer to Vial
Use By: Refer to Vial

Description

The monoclonal antibody D7715A7 recognizes mouse CD126, the IL-6 receptor α chain, a member of the Ig superfamily. CD126 can heterodimerize with CD130 (gp130) to form the high affinity IL-6 receptor. Once IL-6 is bound, signaling from the CD130 subunit is initiated and the receptor complex is internalized. The IL-6 receptor is also reported to exist as a soluble version, which bound to IL-6 acts in trans to signal. Expression is found on T lymphocytes in the periphery and during development in the thymus is restricted to SP populations, unlike gp130 which is expressed in all thymocytes. Additional expression has been shown on activated B lymphocytes, macrophages, granulocytes and CD34+ hematopoietic progenitor cells. The monoclonal antibody D7715A7 binding can be blocked addition of ligand (IL-6).

Applications Reported

This D7715A7 antibody has been reported for use in flow cytometric analysis and has also been reported to block cytokine binding and inhibit in vitro and in vivo growth of cells dependent on IL-6.

Applications Tested

This D7715A7 antibody has been tested by blocking of direct conjugate when staining mouse splenocytes. This can be used at less than or equal to 1 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

Betz UA, Müller W. Regulated expression of gp130 and IL-6 receptor alpha chain in T cell maturation and activation. Int Immunol. 1998 Aug;10(8):1175-84.

Hurchla MA, Sedy JR, Murphy KM.Unexpected role of B and T lymphocyte attenuator in sustaining cell survival during chronic allostimulation. J Immunol. 2007 May 15;178(10):6073-82. (D17715A7, FC, PubMed)

Koizumi N, Yamaguchi T, Kawabata K, Sakurai F, Sasaki T, Watanabe Y, Hayakawa T, Mizuguchi H. Fiber-modified adenovirus vectors decrease liver toxicity through reduced IL-6 production. J Immunol. 2007 Feb 1;178(3):1767-73. (D17715A7, FA, PubMed)

Vink A, Coulie P, Warnier G, Renauld JC, Stevens M, Donckers D, Van Snick J. Mouse plasmacytoma growth in vivo: enhancement by interleukin 6 (IL-6) and inhibition by antibodies directed against IL-6 or its receptor. J Exp Med. 1990 Sep 1;172(3):997-1000. (D17715A7,

FA, PubMed)

Related Products
11-0031 Anti-Mouse CD3e FITC (145-2C11)
12-4317 Streptavidin PE
13-4813 Anti-Rat IgG Biotin (Polyclonal)
14-4031 Rat IgG2b K Isotype Control Purified
16-4031 Rat IgG2b K Isotype Control Functional Grade Purified

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