

TECHNICAL DATA SHEET

APC Anti-Human CD25 (BC96)

Catalog Number: 20-0259

PRODUCT INFORMATION

Contents: APC Anti-Human CD25 (BC96)

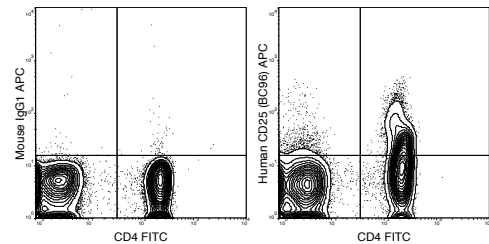
Isotype: Mouse IgG1, kappa

Concentration: 5 uL (0.125 ug)/test

Clone: BC96

Reactivity: Human

Formulation: 10 mM NaH₂PO₄, 150 mM NaCl, 0.09% NaN₃,
0.1% gelatin, pH7.2



Human peripheral blood lymphocytes were stained with FITC Anti-Human CD4 (35-0048) and 5 uL (0.125 ug) APC Anti-Human CD25 (20-0259) (right panel) or 0.125 ug APC Mouse IgG1 isotype control (left panel).

DESCRIPTION

The BC96 antibody is specific for human CD25, a 55 kDa surface protein also known as the Interleukin-2 Receptor alpha chain, or IL-2R alpha. CD25 may bind IL-2 by itself, although with low affinity and without induction of cell signaling. CD25 is also expressed within a high-affinity complex, along with the IL-2R beta chain (CD122) and the common gamma chain (CD132), to form a signaling receptor complex. Signaling via CD25 may modulate Th17 and Treg cell differentiation, and has been shown to play a role in the function of dendritic cells. The BC96 antibody may be used as a marker for expression of CD25 during T and B cell development, on activated mature T and B cells, and for its expression at high levels on natural T regulatory cells (nTreg cells) in the thymus or periphery, and on “induced” peripheral Tregs. This antibody is cross-reactive with CD25 in several non-human species, including Baboon, Chimpanzee, Cynomolgus and Rhesus.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been pre-titrated and quality-tested for flow cytometry using an appropriate cell type. The antibody has been diluted for use at 5 uL per test, defined as the amount of antibody that will stain a cell sample in a final volume of approximately 100 uL. The number of cells within a sample should be determined empirically, but typically ranges between 1x10⁵ to 1x10⁸ cells.

REFERENCES

Willer DO, Ambagala APN, Pilon R, Chan JK, Fournier J, Brooks J, Sandstrom P, and MacDonald KS. 2012. *J. Virol.* 86: 3626-3634. (flow cytometry – cynomolgus) Ruffell B, Au A, Rugo HS, Esserman LJ, Hwang ES, and Coussens LM. 2012. *Proc. Natl. Acad. Sci.* 109: 2796-2801. (flow cytometry) Mackroth MS, Malhotra I, Mungai P, Koech D, Muchiri E, and King CL. 2011. *J. Immunol.* 186: 2780-2791. (flow cytometry) Mori T, Miyamoto T, Yoshida H, Asakawa M, Kawasumi M, Kobayashi T, Morioka H, Chiba K, Toyama Y, and Yoshimura A. 2011. *Int. Immunol.* 23(11):701-712. (Cell sorting / negative selection – T cells) Wan Q, Kozhaya L, ElHed A, Ramesh R, Carlson TJ, Djretic IM, Sundrud MS, and Unutmaz D. 2011. *J. Exp. Med.* 208: 1875-1887. (Cell sorting / negative selection – T cells) Verhoeven D, Sankaran S, Silvey M, and Dandekar S. 2008. *J. Virol.* 82: 4016-4027. (flow cytometry – Rhesus macaque)