TECHNICAL DATA SHEET

APC Anti-Mouse CD152 (CTLA-4) (UC10-4F10-11)

Catalog Number: 20-1522

PRODUCT INFORMATION

Contents: APC Anti-Mouse CD152 (CTLA-4) (UC10-4F10-11)

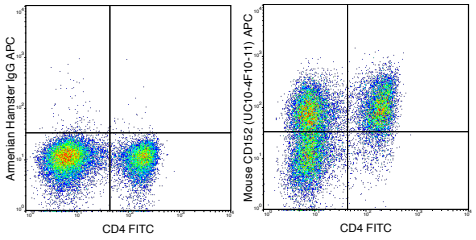
Isotype: Armenian Hamster IgG

Concentration: 0.2 mg/mL

Clone: UC10-4F10-11

Reactivity: Mouse

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



C57Bl/6 splenocytes were stimulated for 3 days with ConA and stained with FITC Anti-Mouse CD4 (35-0041) followed by intracellular staining with 0.06 ug APC Anti-Mouse CD152 (20-1522) (right panel) or 0.06 ug APC Armenian Hamster isotype control (left panel).

DESCRIPTION

The UC10-4F10-11 antibody is specific for mouse CD152, commonly known as CTLA-4, a 33-37 kDa protein expressed as a homodimer on the surface of activated T and B cells, and on thymocytes. CTLA-4 is structurally similar, yet functionally disparate, to the T cell co-stimulatory molecule CD28. Both CTLA-4 and CD28 interact with the co-stimulatory molecules CD80 (B7-1) and CD86 (B7-2) on antigen-presenting cells, with CTLA-4 displaying a higher avidity than CD28. While CD28 typically delivers a potent co-stimulatory signal in support of T cell activation, CTLA-4 appears to act as a negative regulator of T cell activation and may contribute to the suppressor function of Treg cells.CTLA-4 proteins may be initially sequestered within Golgi vesicles, from which they can be rapidly transferred to and from the cell surface, a mechanism by which Treg cells can selectively impart suppressive functions. The UC10-4F10-11 antibody may be used for flow cytometric analysis of CTLA-4 expression.

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 quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

REFERENCES

Lischke T, Hegemann A, Gurka S, Van DV, Burmeister Y, Lam K-P, Kershaw O, Mollenkopf H-J, Mages HW, Hutloff A, and Kroczek RA. 2012. J. Immunol. 189: 234-244. (flow cytometry). Tai X, Laethem FV, Pobezinsky L, Guinter T, Sharrow SO, Adams A, Granger L, Kruhlak M, Lindsten T, Thompson CB, Feigenbaum L, and Singer A. 2012. 119: 5155-5163. (flow cytometry). Matheu MP, Su Y, Greenberg ML, Blanc CA, Parker I, Scott DW, and Calahan MD. 2012. 109: E1258-E1266. (in vitro blocking)