

TECHNICAL DATA SHEET

PE-Cy7 Anti-Mouse CD152 (CTLA-4) (UC10-4F10-11)

Catalog Number: 60-1522

PRODUCT INFORMATION

Contents: PE-Cy7 Anti-Mouse CD152 (CTLA-4) (UC10-4F10

Isotype: Armenian Hamster IgG

Concentration: 0.2 mg/mL

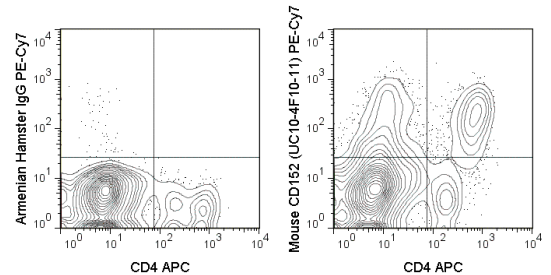
Clone: UC10-4F10-11

Reactivity: Mouse

Use By: 6 months from date of receipt

Storage Conditions: 2-8°C protected from light

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 APC Anti-Mouse CD4 (20-0041) followed by intracellular staining with 0.125 ug PE-Cy7 Anti-Mouse CD152 (60-1522) (right) or 0.125 ug PE-Cy7 Armenian Hamster isotype control (left).

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). Please refer to the figure legend for the optimal concentration used to stain the tissue shown. We recommend titrating the antibody under your specific conditions to determine the optimal concentration of antibody needed in your experimental 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 Kroczeck RA. 2012. J. Immunol. 189: 234-244. (Flow Cytometry).
- Tai X, Laethem FV, Pobeziński 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).

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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