

Anti-Mouse CD152 (CTLA-4) PE

Catalogue Number : 14612-60

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Clone: UC10-4F10-11

Format/Conjugate: PE

Concentration: 0.2 mg/mL

Reactivity: Mouse

Laser: Blue (488nm), Yellow/Green (532-561nm)

Peak Emission: 578nm

Peak Excitation: 496nm

Filter: 585/40

Brightness (1=dim,5=brightest): 5

Isotype: Armenian Hamster IgG

Formulation: Phosphate-buffered aqueous solution, $\leq 0.09\%$ Sodium azide, may contain carrier protein/stabilizer, pH 7.2.

Storage: Product should be kept at 2-8°C and protected from prolonged exposure to light.

Applications: FC

Description

The UC10-4F10-11 monoclonal antibody specifically reacts with the mouse Cytotoxic T-Lymphocyte Antigen-4 (CTLA-4), also known as CD152. It is a protein with a structure similar to CD28 regarding the genomic organization, amino acid sequence, and structure. CTLA-4 is expressed on activated T cells and CD25⁺/CD4⁺ Treg lymphocytes and binds the members of the B7 family, B7-1 (CD80) and B7-2 (CD86), with higher affinity than CD28. CD28 seems to provide opposing signal to T lymphocytes, while CD152 inhibits the T lymphocytes progression to an activated state and their proliferation, CD28 is a costimulator.

The mouse UC10 -4F10-11 monoclonal antibody does not cross-react with the rat leukocytes.

Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. For flow cytometric staining, the suggested use of this reagent is ≤ 0.06 ug per million cells in 100 μ l volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

1. Alegre, M. L., Noel, P. J., Eisfelder, B. J., Chuang, E., Clark, M. R., Reiner, S. L., ; Thompson, C. B. (1996). Regulation of surface and intracellular expression of CTLA4 on mouse T cells.; *The Journal of Immunology*;;157(11), 4762-4770.
2. Walunas, T. L., Lenschow, D. J., Bakker, C. Y., Linsley, P. S., Freeman, G. J., Green, J. M., ... ; Bluestone, J. A. (1994). CTLA-4 can function as a negative regulator of T cell activation.; *Immunity*;;1(5), 405-413.
3. Cilio, C. M., Daws, M. R., Malashicheva, A., Sentman, C. L., ; Holmberg, D. (1998). Cytotoxic T Lymphocyte Antigen 4 Is Induced in the Thymus upon In Vivo Activation and Its Blockade Prevents Anti-CD3-mediated Depletion of Thymocytes.; *The Journal of experimental medicine*;;188(7), 1239-1246.