
Anti-Mouse CD152 (CTLA-4) Purified

Catalog Number: 14-1522

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

Product Information

Contents: Anti-Mouse CD152 (CTLA-4) Purified

 **Catalog Number:** 14-1522

Clone: UC10-4B9


Concentration: 0.5 mg/mL


Host/Isotype: Armenian Hamster IgG

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

 **Temperature Limitation:** Store at 2-8°C.

 **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

 **Caution, contains Azide**

Description

The UC10-4B9 monoclonal antibody reacts with mouse CD152, also known as the cytotoxic T lymphocyte antigen-4 (CTLA-4). CTLA-4, a protein with structural similarities to CD28, is expressed on activated T cells at low level and binds the B7 family members, CD80 (B7-1) and CD86 (B7-2), with higher affinity than CD28 does. CTLA-4 and CD28 appear to deliver opposing signals to T cells: while CD28 is a potent costimulator, CTLA-4 restricts the progression of T cells to an activated state by inhibiting IL-2 secretion and cellular proliferation. The cytoplasmic portion of CTLA-4 contains ER retention motifs, resulting in a large proportion of newly synthesized CTLA-4 in response to TCR signaling to be localized intracellularly.

Furthermore, due to the intracellular localization of a large portion of CTLA-4, for complete detection it may be necessary to assess intracellular expression, in addition to surface expression of CTLA-4.

Applications Reported

The UC10-4B9 antibody has been reported for use in flow cytometric analysis, and immunoprecipitation. It has also been reported in *in vitro* functional studies. (Please use Functional Grade purified UC10-4B9, cat. 16-1522, in functional assays.)

Applications Tested

The UC10-4B9 antibody has been tested by flow cytometric analysis of resting and activated mouse splenocyte suspensions. This can be used at less than or equal to 0.5 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Furthermore, due to the intracellular localization of a large portion of CTLA-4, for complete detection it may be necessary to assess intracellular expression, in addition to surface expression of CTLA-4.

References

June, C.H., J.A. Bluestone, L.M. Nadler and C.B. Thompson (1994) The B7 and CD28 receptor families. *Immunol Today* 15: 231-331.

Krummel, M. F. and J. P. Allison (1995). CD28 and CTLA-4 have opposing effects on the response of T cells to stimulation. *J Exp Med* 182(2): 459-65.

Walunas, T. L., D. J. Lenschow, et al. 1994. CTLA-4 can function as a negative regulator of T cell activation. *Immunity* 1(5): 405-13.

Related Products

11-4111 Anti-Armenian Hamster IgG FITC

14-4888 Armenian Hamster IgG Isotype Control Purified (eBio299Arm)

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