

TECHNICAL DATA SHEET

# In Vivo Ready™ Anti-Mouse CD152 (CTLA-4) (UC10-4F10-11)

Catalog Number: 40-1522

## PRODUCT INFORMATION

**Contents:** In Vivo Ready™ Anti-Mouse CD152

**Isotype:** Armenian Hamster IgG1, kappa

**Concentration:** 2.0 mg/mL

**Clone:** UC10-4F10-11

**Reactivity:** Mouse

**Use By:** 12 months from date of receipt

**Storage Conditions:** 2-8°C

**Endotoxin Level:** Less than or equal to 0.01 EU/ug, as determined by the LaL assay

**Formulation:** 10 mM NaH<sub>2</sub>PO<sub>4</sub>, 150 mM NaCl, pH7.2

## 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 preparation was purified from tissue culture supernatant via affinity chromatography. For In Vivo Ready™ (IVR) products, each preparation is also evaluated for endotoxin levels using the LAL assay. It is recommended to store the product undiluted at 4°C. Do not freeze.

## APPLICATION NOTES

Tonbo Biosciences tests all of our antibodies by flow cytometry. Citations may be provided as a resource for additional applications that have not been validated by Tonbo Biosciences.

## 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, Pobezinsky L, Guintier 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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