



## CELL LAB Hamster Anti-Mouse CD152/CTLA-4

Cat. No.	Form	Quantity
732258	Purified (UNLB) Antibody	0.5 mg

### For Laboratory Use Only

#### DESCRIPTION

<b>Clone:</b>	9H10
<b>Isotype:</b>	Syrian Hamster IgG $\kappa$
<b>Immunogen:</b>	Heat-killed <i>Staphylococcus aureus</i> bacteria coated with mouse CTLA-4/human IgG1 fusion protein <sup>1</sup>
<b>Specificity:</b>	Mouse CD152/CTLA-4 co-stimulatory receptor, Mr 69 kDa

CD152, also known as CTLA-4, is homologous to the co-stimulatory molecule CD28.<sup>1,2</sup> Like CD28, the CD152 molecule binds the family of B7 counter-receptors (CD80/B7-1 and CD86/B7-2) on antigen-presenting cells.<sup>3</sup> CTLA-4 is not expressed on resting T lymphocytes but is induced 2-3 days following T-cell stimulation via the T cell receptor (TCR) complex.<sup>1,3,4</sup> Whereas CD28 provides a positive co-stimulatory signal, CD152/CTLA-4 is a negative regulator of T-cell activation, possibly by inhibiting tyrosine kinase signaling through the TCR through its association with tyrosine phosphatases such as SHP-2.<sup>1,5,6</sup>

#### APPLICATIONS

- Flow cytometry<sup>1</sup>
- Immunoprecipitation<sup>1</sup>
- *In vitro* blocking of CTLA-4 action by soluble antibody<sup>1</sup>
- Promotion of *in vitro* CTLA-4 signaling by cross-linked antibody<sup>1</sup>

#### CHARACTERIZATION

To ensure lot-to-lot consistency, each batch of product is tested to conform with characteristics of a standard reference reagent using flow cytometry.

#### WORKING DILUTIONS

**Flow Cytometry:** Purified antibody  $\leq 3 \mu\text{g}/10^6$  cells

**Other Applications:** Since applications vary, determine the optimum working dilution of the product that is appropriate for your specific needs.

#### HANDLING AND STORAGE

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of 100 mM borate buffered saline, pH 8.0. No preservatives or amine-containing buffer salts added.
- Reagent is stable until the expiration date on the vial when stored at 2-8°C.

## STATEMENT OF WARNINGS

1. Specimens, samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
2. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
3. Do not use reagent beyond the expiration date on the vial label.
4. Minimize exposure of reagent to light during storage or incubation.
5. Avoid microbial contamination of reagent or erroneous results may occur.
6. Use Good Laboratory Practice (GLP) when handling this reagent.

## TRADEMARKS

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For additional information or if damaged product is received, contact your local Beckman Coulter Representative.

## REFERENCES

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3. Perkins D, Wang Z, Donovan C, He H, Mark D, Guan G, Wang Y, Walunas T, Bluestone J, Listman J and Finn PW. 1996. Regulation of CTLA-4 expression during T cell activation. *J Immunol*, 156:4154-4159.
4. Alegre ML, Noel PJ, Eisfelder BJ, Chuang E, Clark MR, Reiner SL and Thompson CB. 1996. Regulation of surface and intracellular expression of CTLA4 on mouse T cells. *J Immunol*, 157:4762-4770.
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6. Marengere LE, Waterhouse P, Duncan GS, Mittrucker HW, Feng GS and Mak TW. 1996. Regulation of T cell receptor signaling by tyrosine phosphatase SYP association with CTLA-4. *Science*, 272:1170-1173.



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