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# Anti-Mouse CD152 (CTLA-4) Functional Grade Purified

**Catalog Number:** 16-1521
**Also Known As:**CTLA4
**RUO: For Research Use Only**

## Product Information

**Contents:** Anti-Mouse CD152 (CTLA-4) Functional Grade Purified
REF **Catalog Number:** 16-1521
**Clone:** 9H10
**Concentration:** 1 mg/ml
**Host/Isotype:** Golden Syrian Hamster IgG
**Handling Conditions:** Use in sterile environment.
**Endotoxin Level:** Less than 0.001 ng/ug antibody, as determined by the LAL assay.

**Formulation:** aqueous buffer, no sodium azide
**Temperature Limitation:** Store at 2-8°C.
LOT **Batch Code:** Refer to Vial
**Use By:** Refer to Vial

## Description

The 9H10 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 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.

## Applications Reported

The 9H10 antibody has been reported for use in flow cytometric analysis. It has also been reported for use in *in vitro* functional studies.

## Applications Tested

The 9H10 antibody has been tested by flow cytometric analysis of resting and ConA-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 $10^5$ to $10^8$ 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


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