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Product datasheet for AM31866FC-N

CTLA4 Mouse Monoclonal Antibody [Clone ID: A3.4H2.H12]

Product data:

Product Type:	Primary Antibodies
Clone Name:	A3.4H2.H12
Applications:	FC
Recommended Dilution:	**Intracellular Flow Cytometry.**
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Activated T cells Donor: Balb/c mouse Fusion Partner: SP 2/0 myeloma
Specificity:	Recognizes Human CTLA-4 (CD152). Other species not tested.
Formulation:	PBS containing 0.02% Sodium Azide as preservative and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml. Label: FITC State: Liquid purified Ig fraction Label: Fluorescein isothiocyanate isomer 1
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein G
Conjugation:	FITC
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	cytotoxic T-lymphocyte associated protein 4
Database Link:	Entrez Gene 1493 Human P16410

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Background: Human CTLA-4 (also known as Cytotoxic T lymphocyte-associated antigen-4, CD152) is a structural homologue of T cell co-stimulatory receptor CD28. CTLA-4 binds to the same ligands (CD80 and CD86) as CD28 but with much higher avidity. It is expressed at very low levels on the cell surface of activated T cells, and is found primarily in the post-Golgi or endosomal compartments of the cell.
There is a high degree of overall homology between human and mouse CTLA-4 (>70%), and the cytoplasmic domains of the human, mouse and rabbit sequences are completely conserved. CD152 antibodies have shown both stimulatory and negative regulatory roles in functional experiments.

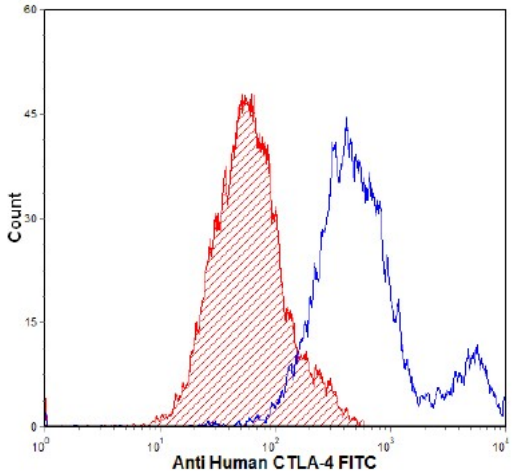
Synonyms: CTLA-4

Note: Protocol: **FLOW CYTOMETRY ANALYSIS:**
1. Prepare cell suspension in Media A. For cell preparations, deplete the red blood cell population with Lympholyte®-H cell separation medium.
2. Wash 2 times.
3. Resuspend the cells to a concentration of 2x10e7 cells/ml in media A. Add 50 µl of this suspension to each tube (each tube will then contain 1 x 10e6 cells, representing 1 test).
4. Fix and permeabilize cells.
5. To each tube, add 1.0 µg of this antibody per 10e6 cells.
6. Vortex the tubes to ensure thorough mixing of antibody and cells.
7. Incubate the tubes for 30 minutes at 4°C.
(It is recommended that the tubes are protected from light, since most flurochromes are light sensitive.)
8. Wash 2 times at 4°C.
9. Resuspend the cell pellet in 50 µl ice cold media B.
10. Transfer to suitable tubes for flow cytometric analysis containing 15 µl of propidium iodide at 0.5 mg/ml in PBS. This stains dead cells by intercalating in DNA.
Media:
A. Phosphate buffered saline (pH 7.2) + 5% normal serum of host species + sodium azide (100 µl of 2M sodium azide in 100 mls).
B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100 µl of 2M sodium azide in 100 mls).
Results:
Tissue Distribution by Flow Cytometry Analysis:
Cell Concentration: 1x10e6 cells per test
Antibody Concentration Used: 1.0 µg/10e6 cells
Isotypic Control (shaded): FITC Mouse IgG2

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Autoimmune thyroid disease, Cell adhesion molecules (CAMs), T cell receptor signaling pathway

Product images:



Cell Source: Human IL2 Activated T-Blasts
Percentage of cells stained above control: 72.0%
Cells were fixed and permeabilized prior to staining