

Biotin anti-mouse CD152

Catalog # / Size: 1131520 / 500 µg
1131515 / 50 µg

Clone: UC10-4B9

Isotype: Hamster IgG

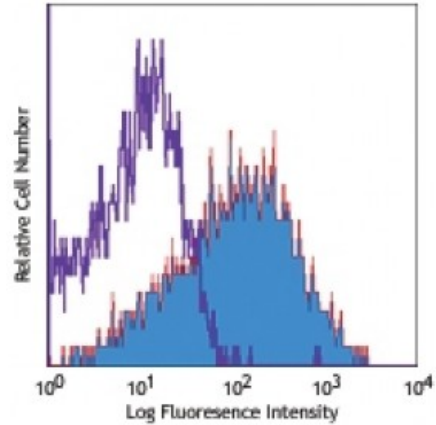
Immunogen: Mouse CTLA-4-mouse IgG2a fusion protein

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5



Con A+IL-2-stimulated (day-2) Balb/c mouse splenocytes stained with biotinylated UC10-4B9, followed by Sav-PE

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤1.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: The UC10-4B9 antibody can enhance T cell co-stimulation by blocking CTLA-4 interactions with the B7 co-receptors, favoring CD28 interactions. Additional reported applications (for the relevant formats) include: immunoprecipitation¹, *in vitro* stimulation, *in vitro* and *in vivo* blocking¹⁻⁴ of ligand binding, and as ELISA capture antibody⁵. To reduce non-specific binding to cells bearing Fc-receptors, pre-incubation of cells with anti-mouse CD16/CD32, clone 93 (Cat. No. 101301/101302), is recommended prior to immunofluorescent staining. For most successful immunofluorescent staining results, it may be important to maximize signal over background by using a relatively bright fluorochrome-antibody conjugate (Cat. No. 106306) or by using a high sensitivity, three-layer staining technique (e.g., including a biotinylated anti-Armenian hamster IgG (Cat. No. 405501) second step, followed by SAv-PE (Cat. No. 405204)). The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 106308).

- Application References:**
1. Walunas TL, *et al.* 1994. *Immunity* 1:405. (Block, IP)
 2. Cilio CM, *et al.* 1998. *J. Exp. Med.* 188:1239. (Block)
 3. Issazadeh S, *et al.* 1999. *J. Immunol.* 162:761. (Block)
 4. McCoy K, *et al.* 1997. *J. Exp. Med.* 186:183. (Block)
 5. Hsu HC, *et al.* 2007. *J. Immunol.* 178:5357. (ELISA Capture)
 6. Sugita S, *et al.* 2010. *Invest. Ophthalmol. Vis. Sci.* 51:5783. [PubMed](#)

Description: CD152, also known as CTLA-4 or Ly-56, is a 33 kD member of the immunoglobulin superfamily. It is expressed on activated T and B lymphocytes. CD152 is similar to CD28 in amino acid sequence, structure, and genomic organization and these two receptors share common B7 family counter-receptors (B7-1, B7-2). Whereas CD28

delivers a costimulatory signal in T cell activation, CTLA-4 negatively regulates cell-mediated immune responses. CD152 is thought to play a role in the induction and maintenance of immunological tolerance as well as the development of protective immunity and thymocyte regulation.

**Antigen
References:**

1. Barclay A, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.
2. Allison JP, *et al.* 1995. *Science* 270:932.
3. Waterhouse P, *et al.* 1995. *Science* 270:985.
4. Linsley PS, *et*