Product Data Sheet

PE/Cy7 anti-mouse CD152

Catalog # / Size: 1131565 / 25 μg

1131570 / 100 µg

Clone: UC10-4B9

Isotype: Hamster IgG

Immunogen: Mouse CTLA-4-mouse IgG2a fusion

protein

Reactivity: Mouse

Preparation: The antibody was purified by affinity

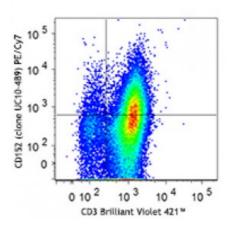
chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7

and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2



Con A+IL-2-stimulated C57BL/6 splenocytes (3 days) were stained with CD3 Brilliant Violet 421[™] and CD152 (clone UC10-4B9) PE/Cy7 (top) or Armenian Hamster IgG PE/Cy7 isotype control (bottom).

Applications:

Applications: Flow Cytometry

Recommended

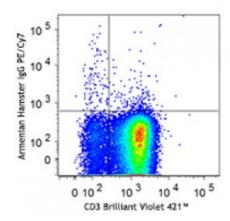
Usage:

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 ≤ 0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

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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 Fcreceptors, 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 fluorochromeantibody 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