

Technical Data Sheet

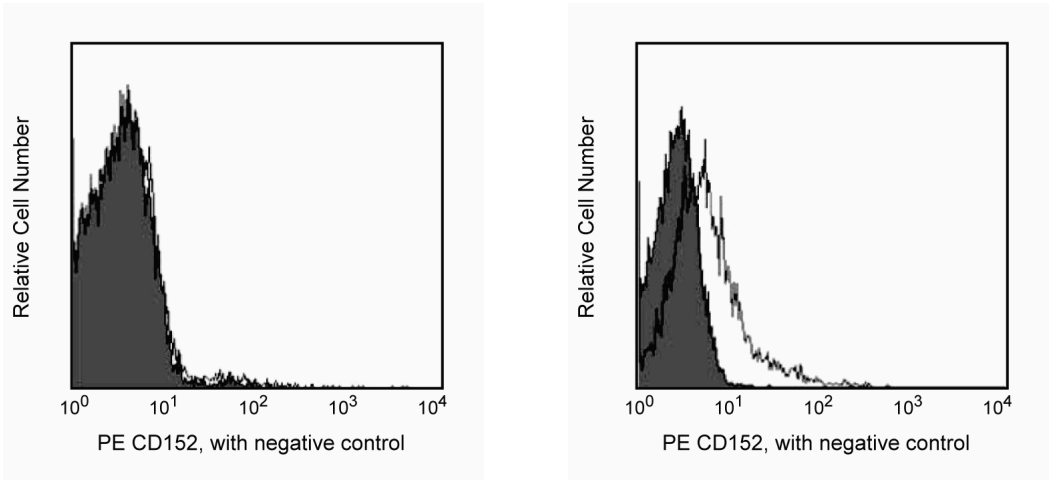
PE Hamster Anti-Mouse CD152

Product Information

Material Number:	553720
Alternate Name:	CTLA-4
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	UC10-4F10-11
Immunogen:	Mouse CTLA-4 IgG2a Fusion
Isotype:	Armenian Hamster IgG1, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The UC10-4F10-11 antibody reacts with CD152 (CTLA-4), which is expressed on activated T lymphocytes 2-3 days after stimulation through T cell receptor. CTLA-4 has significant similarity to CD28 in amino acid sequence, structure, and genomic organization. Furthermore, CD152 and CD28 share common B7 family counter-receptors. Unlike CD28, CD152 expression appears to be restricted to activated T cells and CD25+CD4+ regulatory T (Treg) cells. Whereas CD28 delivers a costimulatory signal required for T-cell activation, CTLA-4 is a negative regulator of cell-mediated immune responses. CD152 may play roles in induction and/or maintenance of immunological tolerance, regulation of protective immunity, and autoimmune responses, and regulation of some aspects of thymocyte maturation. This hamster mAb to a mouse leukocyte antigen does not cross-react with rat leukocytes.



Expression of CD152 on activated T lymphocytes. BALB/c splenocytes were left unactivated (left panel) or were activated for 48 hours with ConA (right panel). The cells were then stained with FITC Rat anti-Mouse CD8a mAb 53-6.7 (Cat. No. 553030/553031) and PE Hamster anti-Mouse CD152 (open histogram), or no PE conjugate (filled histogram), in the presence of Mouse BD Fc Block™ (Purified Rat anti-Mouse CD16/CD32, Cat. No. 553141/553142). Flow cytometry was performed on a BD FACScan™ System (BD Biosciences, San Jose, CA).

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

Flow cytometry	Routinely Tested
Intracellular staining (flow cytometry)	Tested During Development

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Suggested Companion Products

Catalog Number	Name	Size	Clone
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2
554714	BD Cytofix/Cytoperm™ Fixation/Permeabilization Kit	250 tests	(none)
553972	PE Hamster IgG1 κ Isotype Control	0.1 mg	A19-3
554656	Stain Buffer (FBS)	500 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharminggen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Although hamster immunoglobulin isotypes have not been well defined, BD Biosciences Pharmingen has grouped Armenian and Syrian hamster IgG monoclonal antibodies according to their reactivity with a panel of mouse anti-hamster IgG mAbs. A table of the hamster IgG groups, Reactivity of Mouse Anti-Hamster Ig mAbs, may be viewed at http://www.bdbiosciences.com/documents/hamster_chart_11x17.pdf.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
6. An isotype control should be used at the same concentration as the antibody of interest.

References

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