

Technical Data Sheet

APC Mouse Anti-Human CD152

Product Information

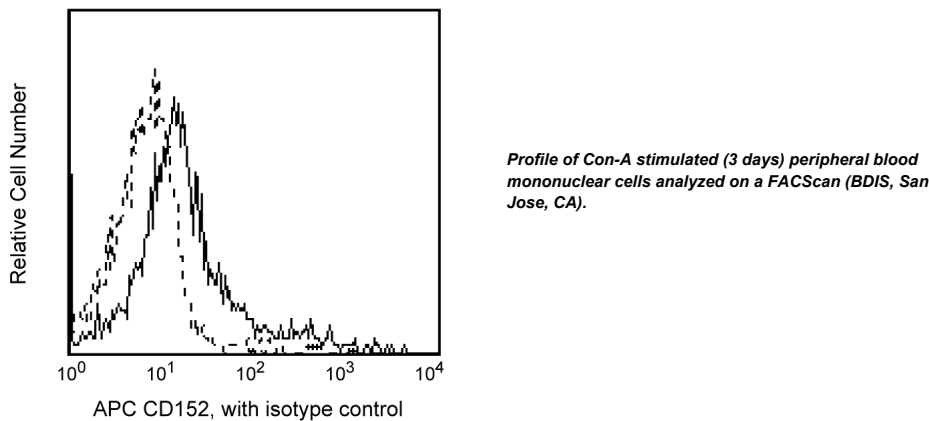
Material Number:	555855
Alternate Name:	CTLA-4
Size:	100 tests
Vol. per Test:	20 µl
Clone:	BN13
Isotype:	Mouse IgG2a, κ
Reactivity:	QC Testing: Human
Workshop:	NA
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

Reacts with the "cytolytic T lymphocyte-associated antigen", CTLA-4. CTLA-4 is transiently expressed on activated CD28+ T cells and binds to CD80 and CD86 present on antigen presenting cells (APC) with high avidity. This interaction appears to deliver a negative regulatory signal to the T cell. There are recent reports that indicate that CTLA-4 is also expressed on B cells when cultured with activated T cells, suggesting a possible role of CTLA-4 in the regulation of B-cell response. Immobilized BN13.1 enhances T-cell proliferation induced by CD3 and CD28.

Recent studies have showed that CD152 can be expressed by regulatory T (Treg) cells. It has been found this antibody can stain the intracellular CD152 on the Treg cells after fixation and permeabilization of cells.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Preparation and Storage

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

Application Notes

Application

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

Suggested Companion Products

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Catalog Number	Name	Size	Clone
555576	APC Mouse IgG2a, $\kappa$ Isotype Control	100 tests	G155-178
554714	BD Cytotfix/Cytoperm™ Fixation/Permeablization Kit	250 tests	(none)

## Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use  $1 \times 10^6$  cells in a 100- $\mu$ l experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
5. This conjugated product is sold under license to the following patents: US Patent Nos. 4,520,110; 4,859,582; 5,055,556; European Patent No. 76,695; and Canadian Patent No. 1,179,942.
6. 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.
7. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

## References

Barclay NA, Brown MH, Birkeland ML, et al, ed. *The Leukocyte Antigen FactsBook*. San Diego, CA: Academic Press; 1997. (Biology)

Kuiper HM, Brouwer M, Linsley PS, van Lier RA. Activated T cells can induce high levels of CTLA-4 expression on B cells. *J Immunol*. 1995; 155(4):1776-1783. (Biology)

Lindsten T, Lee KP, Harris ES, et al. Characterization of CTLA-4 structure and expression on human T cells. *J Immunol*. 1993; 151(7):3489-3499. (Biology)

Morton PA, Fu XT, Stewart JA, et al. Differential effects of CTLA-4 substitutions on the binding of human CD80 (B7-1) and CD86 (B7-2). *J Immunol*. 1996; 156(3):1047-1054. (Biology)