

Technical Data Sheet

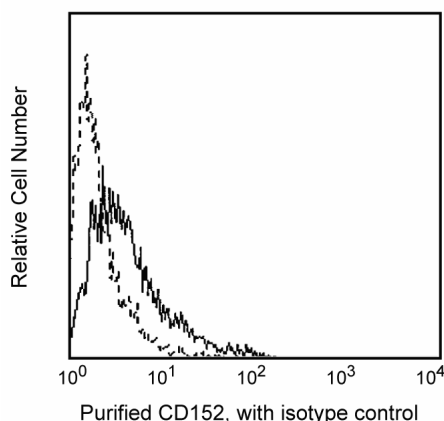
Purified Mouse Anti-Human CD152**Product Information**

Material Number:	555851
Alternate Name:	CTLA-4
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	BNI3
Isotype:	Mouse IgG2a, κ
Reactivity:	QC Testing: Human
Workshop:	NA
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ 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 BNI3.1 enhances T-cell proliferation induced by CD3 and CD28.

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.



Profile of concanavalin-A-stimulated 3-day peripheral blood mononuclear cells analyzed on a FACScan (BDIS, San Jose, CA)

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4° C.

Application Notes**Application**

Flow cytometry	Routinely Tested
Immunohistochemistry-frozen	Tested During Development

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2006 BD

**BD****BD Biosciences**

Recommended Assay Procedure:

For flow cytometric applications, a three step labeling procedure is recommended for amplifying signal. Suggested protocol for 3-step staining using concanavalin-A-stimulated peripheral blood mononuclear cells method:

1. Incubate 100 µl concanavalin-A-stimulated 3-day peripheral blood mononuclear cells (1×10^6) with primary (unconjugated) antibody for 20-30 minutes at room temperature.
2. Add 2 mls of 1X PharM Lyse (10X PharM Lyse, Cat. No. 555899) and incubate for 10-15 minutes. Centrifuge and aspirate.
3. Wash once with PBS/0.1% sodium azide/1% heat-inactivated fetal bovine serum (PBS-FBS0. Centrifuge and aspirate.
4. Add biotinylated goat anti-mouse Ig's (Cat. No. 553999) and incubate for 20-30 minutes at room temperature.
5. Wash once with PBS-FBS. Centrifuge and aspirate.
6. Add SAV-PE (Cat. No. 554061) and incubate for 20-30 minutes in the dark at room temperature.
7. Wash once with PBS-FBS. Centrifuge and aspirate. Resuspend in 0.5 ml of PBS-FBS and analyze by flow cytometry.

Suggested Companion Products

Catalog Number	Name	Size	Clone
555899	Lysing Buffer	100 ml	(none)
554061	Streptavidin PE	0.5 mg	(none)
553999	Biotin Goat Anti-Mouse Ig	0.5 mg	Polyclonal
555571	Purified Mouse IgG2a, κ Isotype Control	0.1 mg	G155-178

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/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.

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)