

Technical Data Sheet

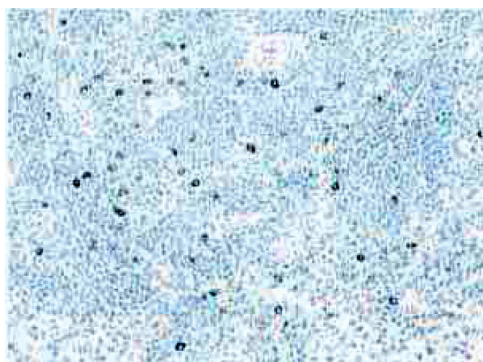
Purified Mouse Anti-Rat $\gamma\delta$ T Cell Receptor

Product Information

Material Number:	550308
Size:	1.0 ml
Concentration:	125 μ g/ml
Clone:	V65
Immunogen:	Rat CD3+ $\alpha\beta$ TCR- T-cell hybridoma III.89.1.4
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Rat
Storage Buffer:	Aqueous buffered solution containing BSA, goat serum, and $\leq 0.09\%$ sodium azide.

Description

The V65 antibody reacts with the $\gamma\delta$ T-cell Receptor (TCR) found on CD3+ $\alpha\beta$ TCR-peripheral T lymphocytes, on a small subset of intestinal intraepithelial lymphocytes, and on dendritic epidermal T cells. Cross-linked V65 mAb induces cytokine-dependent T-cell mitogenesis *in vitro*, and *in vivo* treatment can significantly deplete peripheral $\gamma\delta$ TCR-expressing T cells. A suspension of rat CD3+ $\alpha\beta$ TCR-T-cell hybridoma III.89.1.4 was used as the source of the immunogen.



Immunohistochemical staining of T lymphocytes. The frozen section of normal rat spleen was stained with V65 mAb. $\gamma\delta$ TCR+ cells can be identified by the brown labeling of their cell surface membranes.

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Flow cytometry	Routinely Tested
Immunohistochemistry-frozen	Tested During Development
Immunohistochemistry-formalin (antigen retrieval required)	Not Recommended

Recommended Assay Procedure:

Immunohistochemistry: The V65 antibody is recommended to test for immunohistochemical staining of acetone-fixed frozen sections. The clone V65 is not recommended for formalin-fixed paraffin embedded sections. Tissues tested were rat spleen, thymus and gastro-intestinal tract. The antibody stains the $\gamma\delta$ TCR+ lymphocytes. For optimal indirect immunohistochemical staining, the V65 antibody should be titrated (1:10 to 1:50 dilution) and visualized via a three-step staining procedure in combination with biotinylated polyclonal anti-mouse Ig (multiple adsorbed) (Cat. No. 550337) as the secondary antibody and Streptavidin-HRP (Cat. No. 550946) together with the DAB detection system (Cat. No. 550880). More conveniently, the anti-mouse Ig HRP detection kit (Cat. No. 551011) can be used which contains the biotinylated secondary antibody, the antibody diluent, streptavidin-HRP and a DAB substrate for use in the staining procedure.

A detailed protocol of the immunohistochemical procedure can be found on our website at www.bdbiosciences.com/support/resources

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

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.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD

Suggested Companion Products

Catalog Number	Name	Size	Clone
550337	Biotin Goat Anti-Mouse Ig (Multiple Adsorption)	1.0 ml	Polyclonal
550880	DAB Substrate Kit	500 tests	(none)
550946	Streptavidin HRP	50 ml	(none)
550878	Purified Mouse IgG1 κ Isotype Control	1.0 ml	MOPC-31C
551011	Anti-Mouse Ig HRP Detection Kit	200 tests	(none)
559148	Antibody Diluent for IHC	125 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. 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.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. An isotype control should be used at the same concentration as the antibody of interest.
5. This antibody has been developed for the immunohistochemistry application. However, a routine immunohistochemistry test is not performed on every lot. Researchers are encouraged to titrate the reagent for optimal performance.
6. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.

References

Kuhnlein P, Park JH, Herrmann T, Elbe A, Hunig T. Identification and characterization of rat gamma/delta T lymphocytes in peripheral lymphoid organs, small intestine, and skin with a monoclonal antibody to a constant determinant of the gamma/delta T cell receptor. *J Immunol.* 1994; 153(3):979-986. (Immunogen)
Pelegrini C, Kuhnlein P, Buchner E, et al. Depletion of gamma/delta T cells does not prevent or ameliorate, but rather aggravates, rat adjuvant arthritis. *Arthritis Rheum.* 1996; 39(2):204-215. (Biology)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

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.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD

