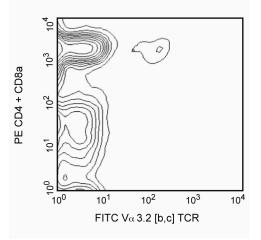
# Technical Data Sheet FITC Rat Anti-Mouse Vα 3.2[b,c] TCR

Product Information	
Material Number:	553219
Size:	0.25 mg
Concentration:	0.5 mg/ml
Clone:	RR3-16
Immunogen:	Mouse Cytolytic T-Cell Clone OH6
Isotype:	Rat (F344) IgG2b, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

#### Description

The RR3-16 antibody reacts with the V $\alpha$  3.2 T-Cell Receptor (TCR) of mice having the *b* (e.g., C57BL) and *c* (e.g., SWR, SJL, NZB, NOD) haplotypes of the *Tcra* gene complex, but not with TCR encoded by other members of *Tcra-V3* gene subfamily. RR3-16 antibody does not react with strains having the *a* (e.g., A, AKR, BALB/c, CBA, C3H/He) or *d* (e.g., DBA/1, DBA/2, NZW) *Tcra* haplotypes. In addition, it has been shown that frequencies of V $\alpha$  3.2+ CD8+ T cells from homozygous H-2k/H-2k mice are moderately higher than those from heterozygous H-2k/H-2d mice, suggesting positive selection by H-2k.

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.



Two-color analysis of the expression of Va 3.2b,c TCR on peripheral lymphocytes. C57BL/6 lymph node leukocytes were simultaneuosly stained with FITC-conjugated RR3-16, PE-conjugated anti-mouse CD4 RM4-5 (Cat. No. 553048/553049), and PE-conjugated anti-mouse CD8a 53-6.7 (Cat. No. 553032/55303) monoclonal antibodies. Flow cytometry was performed on a BD FACScan™ flow cytometry system.

### Preparation and Storage

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

### **Application Notes**

Application	
Flow cytometry	Routinely Tested
BD Biosciences	
United States Canada Europe Japan Asia Pacific Latin Amer 877.232.8995 888.259.0187 32.53.720.550 0120.8555.90 65.6861.0633 55.11.5185. For country-specific contact information, visit www.bdbiosciences.com/how_to_order/	ica/Caribbean .9995 Government Governme
Conditions: The information disclosed herein is not to be construed as a recommendation to use the above pro of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that ma use of our products. Purchase does not include or carry any right to resell or transfer this product either as a st product or as a component of another product. Any use of this product other than the permitted use without written authorization of Becton Dickinson and Company is strictly prohibited. For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resele. BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2007 BD	y occur with the and-alone

#### **Suggested Companion Products**

Catalog Number	Name	Size	Clone	
553048	PE Rat Anti-Mouse CD4	0.1 mg	RM4-5	
553032	PE Rat Anti-Mouse CD8a	0.1 mg	53-6.7	
553988	FITC Rat IgG2b, κ Isotype Control	0.25 mg	A95-1	

## **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

Tomonari K, Fairchild S, Rosenwasser OA. Influence of viral superantigens on V beta- and V alpha-specific positive and negative selection. *Immunol Rev.* 1993; 131:131-168.(Biology)

Utsunomiya Y, Bill J, Palmer E, Gollob K, Takagaki Y, Kanagawa O. Analysis of a monoclonal rat antibody directed to the alpha-chain variable region (V alpha 3) of the mouse T cell antigen receptor. *J Immunol.* 1989; 143(8):2602-2608.(Immunogen)

Utsunomiya Y, Bill J, Palmer E, Kanagawa O. Identification of a mouse T-cell antigen receptor alpha-chain polymorphism by a V alpha 3.2 chain-specific monoclonal antibody. *Immunogenetics.* 1991; 33(3):198-201.(Clone-specific)