# **Technical Data Sheet**

## FITC Rat Anti-Mouse Vα2 TCR

#### **Product Information**

553288 **Material Number:** 0.25 mg Size: 0.5 mg/ml **Concentration:** B20.1 Clone:

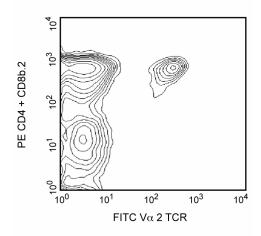
Soluble αβ TCR from mouse cytotoxic T-cell clone KB5-C20 Immunogen:

Rat (LOU) IgG2a, λ Isotype: QC Testing: Mouse Reactivity:

Aqueous buffered solution containing ≤0.09% sodium azide. Storage Buffer:

### Description

The B20.1 antibody reacts with most members of the  $V\alpha 2$  T-cell Receptor (TCR) subfamily in mice having the a, b, and c haplotypes of the Tcrb gene complex. B20.1 antibody may cross-react with Vδ8 TCR, which shares >90% sequence homology with Vα2 TCR. Levels of B20.1+ T cells appear to be influenced by  $V\alpha$  haplotypes. Moreover, the frequencies of  $V\alpha$ 2+ CD8+ and CD4+ T cells are influenced by H-2 haplotypes.



Two-color analysis of the expression of Vα2 TCR on peripheral lymphocytes. BALB/c lymph node cells were incubated simultaneously with FITC-conjugated B20.1, PE-conjugated RM4-5 (anti-CD4, Cat. No. 553048/553049), and PE-conjugated 53-5.8 (anti-CD8b.2, Cat. No. 553041) monoclonal antibodies. Flow cytometry was performed on a FACScan™ (BDIS, San Jose, CA).

### **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**

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	Flow cytometry	Routinely Tested		

#### **Recommended Assay Procedure:**

For flow cytometry of cell suspensions from peripheral lymphoid tissues, it is recommended that multicolor staining be performed to distinguish T lymphocytes from non-T cells.

### **BD Biosciences**

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### **Suggested Companion Products**

Catalog Number	Name	Size	Clone	
553048	PE Rat Anti-Mouse CD4	0.1 mg	RM4-5	
553041	PE Rat Anti-Mouse CD8b.2	0.1 mg	53-5.8	
557077	FITC Rat IgG2a, λ Isotype Control	0.25 mg	B39-4	

### **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.
- 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

Gregoire C, Rebai N, Schweisguth F, et al. Engineered secreted T-cell receptor alpha beta heterodimers. *Proc Natl Acad Sci U S A.* 1991; 88(18):8077-8081. (Clone-specific)

Pircher H, Rebai N, Groettrup M, et al. Preferential positive selection of V alpha 2+ CD8+ T cells in mouse strains expressing both H-2k and T cell receptor V alpha a haplotypes: determination with a V alpha 2-specific monoclonal antibody. Eur J Immunol. 1992; 22(2):399-404.(Immunogen)

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)

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