# Technical Data Sheet PE Rat Anti-Mouse Vβ 10[b] TCR

Material Number:	553285	
Size:	0.1 mg	
Concentration:	0.2 mg/ml	
Clone:	B21.5	
Immunogen:	Mouse Cytotoxic T-Cell Clone Soluble aß TCR	
Isotype:	Rat (LOU) IgG2a, $\lambda$	
Reactivity:	QC Testing: Mouse	
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.	

## Description

The B21.5 antibody reacts with the V $\beta$  10 T-Cell Receptor (TCR) of mice having the *b* haplotype (e.g., A, AKR, BALB/c, CBA, C3H/He, C57BL, C58, DBA/1, DBA/2) of the *Tcrb* gene complex. It does not react with mice having the *a* (e.g., C57BR, C57L, SJL, SWR) or *c* (e.g., RIII) *Tcrb* haplotype.



Two-color analysis of the expression of Vβ 10[b] TCR on peripheral lymphocytes. C57BL/6 lymph node cells were incubated simultaneously with PE-conjugated B21.5, FITC-conjugated RM4-5 (anti-CD4, Cat. No. 553046/553047), and FITC-conjugated 53-6.7 (anti-CD8a, Cat. No. 553030/553031) 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 R-PE under optimum conditions, and unconjugated antibody and free PE were removed by gel filtration chromatography.

Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

#### **Application Notes**

Application	
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. PE has been reported to bind mouse B cells via Fc $\gamma$ II receptors. For immunostaining of mouse cells, this binding can be prevented by preincubating cells with Mouse FC Block<sup>TM</sup> (Cat. No. 553141/553142).

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# **Suggested Companion Products**

Catalog Number	Name	Size	Clone
553046	FITC Rat Anti-Mouse CD4	0.1 mg	RM4-5
553030	FITC Rat Anti-Mouse CD8a	0.1 mg	53-6.7
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2
557076	PE Rat IgG2a, λ Isotype Control	0.1 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.
- 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

Necker A, Rebai N, Matthes M, et al. Monoclonal antibodies raised against engineered soluble mouse T cell receptors and specific for V alpha 8-, V beta 2- or V beta 10-bearing T cells. *Eur J Immunol.* 1991; 21(12):3035-3040.(Immunogen)

Takizawa F, Kinet JP, Adamczewski M. Binding of phycoerythrin and its conjugates to murine low affinity receptors for immunoglobulin G. J Immunol Methods. 1993; 162(2):269-272.(Biology)