

Technical Data Sheet

PE Rat Anti-Mouse V β 6 T-Cell Receptor

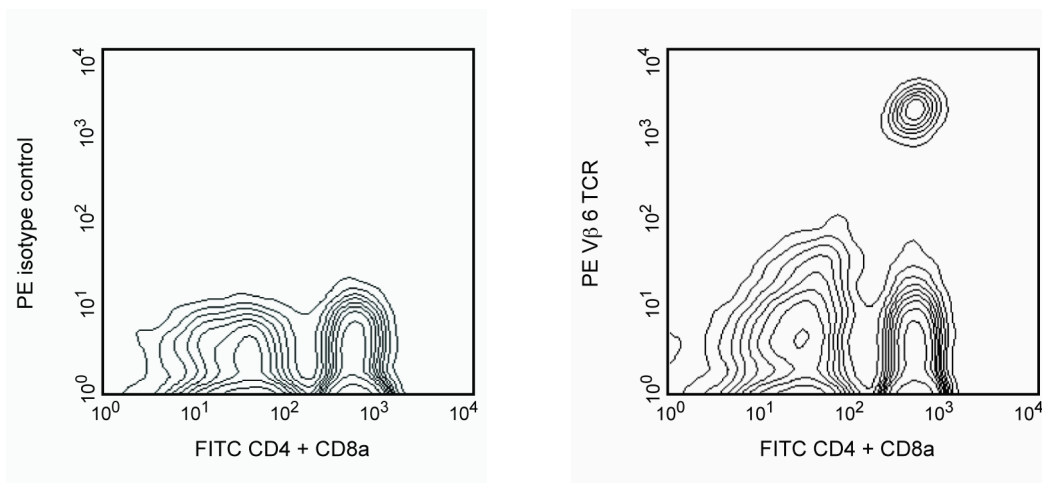
Product Information

Material Number:	553194
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	RR4-7
Immunogen:	C57BL/6 Mouse Helper T-Cell Clone OI11
Isotype:	Rat (F344) IgG2b, λ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The RR4-7 antibody reacts with the V β 6 T-Cell Receptor (TCR) of mice having the *a* (e.g., C57BR, C57L, SJL) and *b* (e.g., A, BALB/c, CBA/Ca, C3H/He, C57BL, DBA/1) haplotypes of the *Tcrb* gene complex. The *Tcrb-V6* gene locus is deleted in mice having the *c* (e.g., RIII) haplotype. V β 6 TCR-bearing T lymphocytes are clonally eliminated in mice expressing superantigen encoded by *Mtv-7* (*Mls-1[a]*, *Mls[a]*) endogenous provirus (e.g., AKR, CBA/J, C58, DBA/2, NZB), or *Mtv-43* endogenous provirus (e.g., MA/MyJ). Exogenous MMTV-SW, as well as endogenous *Mtv-44*-encoded superantigen (e.g., NZW), also causes incomplete elimination of V β 6 TCR-expressing T cells. Plate-bound RR4-7 antibody activates V β 6 TCR-bearing T cells, soluble RR4-7 mAb blocks *in vitro* proliferation and cytolytic activities of V β 6 TCR-bearing T-cell clones, and injection of the antibody results in *in vivo* depletion of V β 6 TCR-bearing T cells.

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 V β 6 TCR on peripheral T lymphocytes. C57BL/6 lymph node cells were incubated simultaneously with either PE-conjugated A95-1 (rat IgG2b, κ isotype control, Cat. No. 553989, left panel) or PE-conjugated RR4-7 (right panel), FITC-conjugated RM4-5 (anti-mouse CD4, Cat. No. 553046/553047, both panels), and FITC-conjugated 53-6.7 (anti-mouse CD8a, Cat. No. 553030/553031, both panels) 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.

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Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
553989	PE Rat IgG2b, κ Isotype Control	0.1 mg	A95-1
553046	FITC Rat Anti-Mouse CD4	0.1 mg	RM4-5
553030	FITC Rat Anti-Mouse CD8a	0.1 mg	53-6.7

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.
3. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/pharming/colors.
4. 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

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