

Technical Data Sheet

FITC Rat Anti-Mouse Vβ 6 T-Cell Receptor

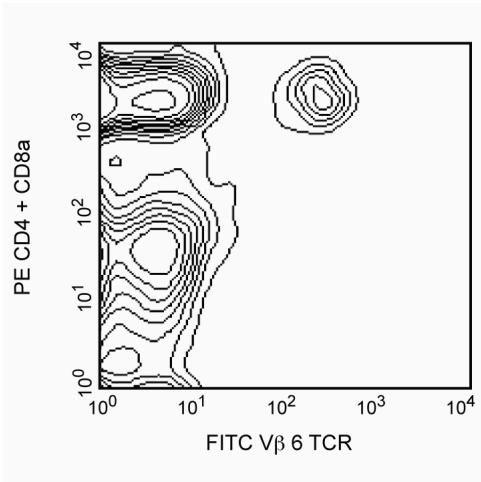
Product Information

Material Number:	553193
Size:	0.25 mg
Concentration:	0.5 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 ≤0.09% sodium azide.

Description

The RR4-7 antibody reacts with the Vβ 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. Vβ 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 Vβ 6 TCR-expressing T cells. Plate-bound RR4-7 antibody activates Vβ 6 TCR-bearing T cells, soluble RR4-7 mAb blocks *in vitro* proliferation and cytolytic activities of Vβ 6 TCR-bearing T-cell clones, and injection of the antibody results in *in vivo* depletion of Vβ 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 Vβ 6 TCR on peripheral T lymphocytes. C57BL/6 lymph node cells were incubated simultaneously with FITC-conjugated RR4-7, PE-conjugated RM4-5 (anti-CD4, Cat. No. 553048/553049), and PE-conjugated 53-6.7 (anti-CD8a, Cat. No. 553032/553033) 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

Application

Flow cytometry/immunoassay	Routinely Tested
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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/pharming/en/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

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