

Technical Data Sheet

Biotin Rat Anti-Mouse Vβ 11 T-Cell Receptor

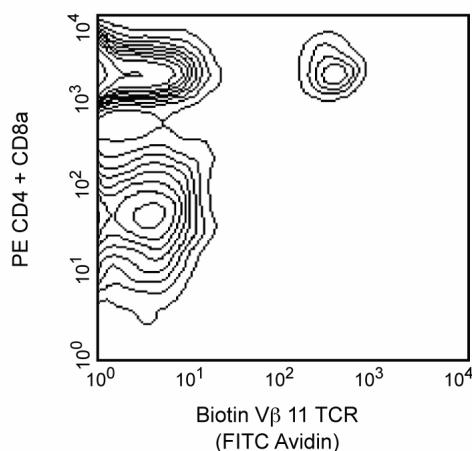
Product Information

Material Number:	553196
Size:	0.25 mg
Concentration:	0.5 mg/ml
Clone:	RR3-15
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 RR3-15 antibody reacts with the Vβ 11 T-Cell Receptor (TCR) of mice having the b haplotype (e.g., A, C57BL, C58, DBA/1) of the Tcrb gene complex. The Tcrb-V11 gene locus is deleted in mice having the a (e.g., C57BR, C57L, SJL, SWR) and c (e.g., RIII) haplotypes. Vβ TCR-bearing T lymphocytes are clonally eliminated in mice expressing I-E and superantigens encoded by Mtv-9 (Etc-1, Mls[f], Dvb11.2) and/or Mtv-11 (Mls[f], Dvb 11.2) proviruses (e.g., AKR, BALB/c, CBA/J, C3H, DBA/2), and they are incompletely eliminated in mice expressing I-E and Mtv-8 (Mls[f], Dvb 11.1) superantigen (e.g., A). Activation of Vβ 11 TCR-expressing T cells by these determinants is dependent upon presentation by I-E. The bacterial superantigen Staphylococcal enterotoxin A (SEA) also interacts with Vβ 11 TCR, and in vivo exposure to SEA causes activation and subsequent deletion of Vβ TCR-expressing lymphocytes. Plate-bound RR3-15 antibody activates Vβ 11 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 11 TCR on peripheral lymphocytes. C57BL/6 lymph node cells were incubated simultaneously with biotin-conjugated RR3-15, PE-conjugated RM4-5 (anti-CD4, Cat. No. 553048/553049), and PE-conjugated 536.7 (anti-CD8a, Cat. No. 553032/553033) monoclonal antibodies, followed by Avidin-FITC (Cat. No. 554057). 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 biotin under optimum conditions, and unreacted biotin was removed.

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.

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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
554057	Avidin FITC	0.5 mg	(none)
553987	Biotin 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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