Technical Data Sheet FITC Mouse Anti-Mouse Vβ 17[a] T-Cell Receptor

Product Information	
Material Number:	553212
Size:	0.25 mg
Concentration:	0.5 mg/ml
Clone:	KJ23
Immunogen:	Mouse T cells
Isotype:	Mouse (BALB/c) IgG2a, ĸ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The KJ23 antibody reacts with the V β 17[a] T-cell Receptor (TCR) of mice having the *a* haplotype (eg,C57L, SJL, SWR) of the *Tcrb* gene complex. Strains having the *b* (eg, A, AKR, BALB/c, CBA,C3H/He, C57BL, C58, DBA/1, DBA/2) *Tcrb* haplotype do not express functional V β 17 TCR, and the *Tcrb-V17* gene locus is deleted in mice having the *c* (eg, RIII) haplotype. V β 17[a] TCR-bearing Tlymphocytes are clonally eliminated in mice expressing I-E (eg, C57BR). KJ23 antibody also recognizes two phenotypic variants of the V β 17[a] TCR: V β 17[a2] expressed in a variety of wild-derived mouse strains and V β 17[a(cz)] expressed in *Mtv*-free CZ mice. The effects of *Mtv*-encoded superantigens upon V β 17[a] TCR-bearing T cells has been reviewed. Plate-bound KJ23 antibody activates V β 17[a] TCR-bearing T cells, and injection of the antibody can deplete V β 17[a]-bearing T cells.



Two-color analysis of the expression of VB17a TCR on peripheral lymphocytes. SJL/J lymph node cells were incubated simultaneously with FITC-conjugated mAb KJ23, PE-conjugated anti-mouse CD4 mAb RM4-5 (Cat. no. 553048/553049), and PE-conjugated anti-mouse CD8a mAb 53-6.7 (Cat. no. 553032/55303). Flow cytometry was performed on a BD FACScan[™] flow cytometry system.

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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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
553456	FITC Mouse IgG2a, κ Isotype Control	0.25 mg	G155-178

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

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