

Technical Data Sheet

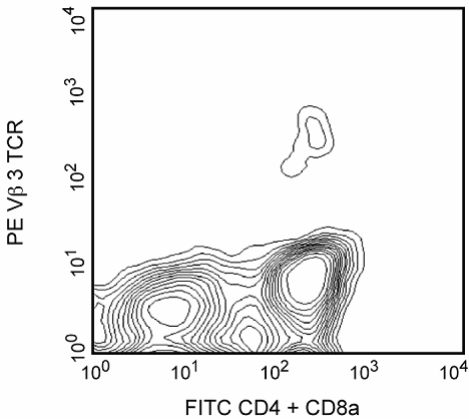
PE Hamster Anti-Mouse Vβ 3 T-Cell Receptor

Product Information

Material Number:	553209
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	KJ25
Immunogen:	αβ TCR purified from mouse T-cell hybridoma 2B4.6
Isotype:	Armenian Hamster IgG2, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The KJ25 antibody reacts with the Vβ 3 T-cell Receptor (TCR) of strains having the *a* (e.g., C57BR, SJL), *b* (e.g., AKR, CBA/Ca, C57BL, DBA/1), and *c* (e.g., RIII) haplotypes of the *Tcrb* gene complex. Vβ 3 TCR-bearing T lymphocytes are clonally eliminated either completely or partially in mice expressing superantigens encoded by the *Mtv-1* (*Mls-4[a]*, *Mls[c]*), *Mtv-3* (*Mls[c]*), *Mtv-6* (*Mls-3[a]*, *Mls[c]*), *Mtv-13* (*Mls-2[a]*, *Mls[c]*), *Mtv-27*, *Mtv-44*, and/or *Mtv-MAI* endogenous proviruses (e.g., A, BALB/c, CBA/J, C3H/He, DBA/2, NZB, NZW). Vβ 3 TCR-bearing T cells are activated by the superantigenic Staphylococcal Enterotoxins A and B. Activation or elimination of Vβ 3 TCR-expressing T cells by these determinants is partially dependent upon presentation by I-E. This hamster mAb to a mouse leukocyte antigen does not cross-react with rat leukocytes.



Two-color analysis of the expression of Vβ 3 TCR on peripheral lymphocytes. C57BL/6 lymph node cells were incubated simultaneously with PE-conjugated KJ25, 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® (BD Biosciences, 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. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
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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.

BD Biosciences

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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
550085	PE Hamster IgG2, κ Isotype Control	0.1 mg	B81-3

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. Although hamster immunoglobulin isotypes have not been well defined, BD Biosciences Pharmingen has grouped Armenian and Syrian hamster IgG monoclonal antibodies according to their reactivity with a panel of mouse anti-hamster IgG mAbs. A table of the hamster IgG groups, Reactivity of Mouse Anti-Hamster Ig mAbs, may be viewed at http://www.bdbiosciences.com/pharmingen/hamster_chart_11x17.pdf.
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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