

Technical Data Sheet

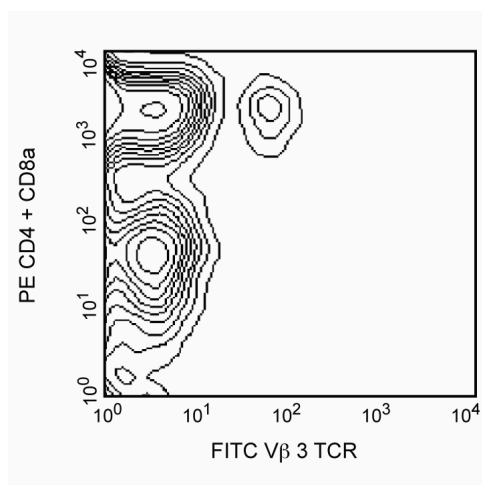
FITC Hamster Anti-Mouse Vβ 3 T-Cell Receptor

Product Information

Material Number:	553208
Alternate Name:	TCR V beta 3; TCR Vβ3
Size:	0.25 mg
Concentration:	0.5 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 specifically 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 FITC Hamster Anti-Mouse Vβ 3 T-Cell Receptor (Cat. No. 553208), PE Rat Anti-Mouse CD4 (Cat. No. 553048/553049), and PE Rat Anti-Mouse CD8a (Cat. No. 553032/553033) monoclonal antibodies. The fluorescence contour plot was derived from gated events based on the forward and side light-scattering of viable lymphocytes. Flow cytometry was performed on a BD FACScan™.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

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.

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553208 Rev. 9



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.

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
550056	FITC Hamster IgG2 κ Isotype Control	0.25 mg	B81-3
553049	PE Rat Anti-Mouse CD4	0.2 mg	RM4-5
553033	PE Rat Anti-Mouse CD8a	0.2 mg	53-6.7
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
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.
4. 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://wwwbdbiosciences.com/documents/hamster_chart_11x17.pdf.
5. For fluorescence spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at wwwbdbiosciences.com/colors.
6. Please refer to wwwbdbiosciences.com/pharmingen/protocols for technical protocols.

References

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