Technical Data Sheet

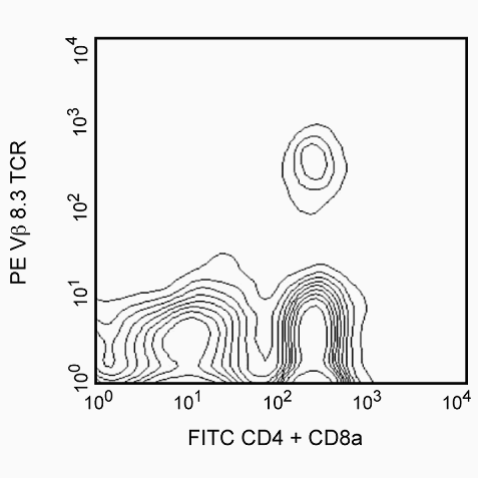
PE Hamster Anti-Mouse Vβ 8.3 T-Cell Receptor

Product Information

Material Number:	**553664**
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	1B3.3
Immunogen:	Vβ 8.3 TCR-expressing mouse Th1 clone 3.L2
Isotype:	Armenian Hamster IgG3, λ1
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 1B3.3 antibody reacts with the Vβ 8.3 T-cell Receptor (TCR), but not the Vβ 8.1 nor Vβ 8.2 TCR, of mice having the *b* haplotype (e.g., A, AKR, BALB/c, CBA/Ca, CBA/J, C3H/He, C57BL, C58, DBA/1, DBA/2) of the *Tcrb* gene complex. The *Tcrb-V8* subfamily gene loci are deleted in mice having the *a* (e.g., C57BR, C57L, SJL, SWR) or c (e.g., RIII) haplotype. Vβ 8.3 is one of the restricted TCR β chains expressed by NK-T cells. Staphylococcal enterotoxin B, in association with antigen-presenting cells expressing I-A and/or I-E, stimulates lymphocytes bearing Vβ 8 TCR and selectively eliminates those T cells *in vivo*. Vβ 8.3 TCR-bearing T-cell clones can be activated by 1B3.3 mAb. This hamster mAb to a mouse leukocyte antigen does not cross-react with rat leukocytes.



Two-color analysis of the expression of Vβ 8.3 TCR on peripheral lymphocytes. *C57BL/6 lymph node cells were incubated simultaneously with PE-conjugated 1B3.3, FITC-conjugated anti-mouse CD4 RM4-5 (Cat. No. 553046/553047), and FITC-conjugated anti-mouse CD8a 53-6.7 (Cat. No. 553030/553031) monoclonal antibodies. 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 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

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
553046	FITC Rat Anti-Mouse CD4	0.1 mg	RM4-5
553030	FITC Rat Anti-Mouse CD8a	0.1 mg	53-6.7
553980	PE Hamster IgG3 λ1 Isotype Control	0.1 mg	A19-4

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. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/pharmingen/colors.
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.
5. 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.

References

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