

Technical Data Sheet

V450 Rat Anti-Mouse CD90.2

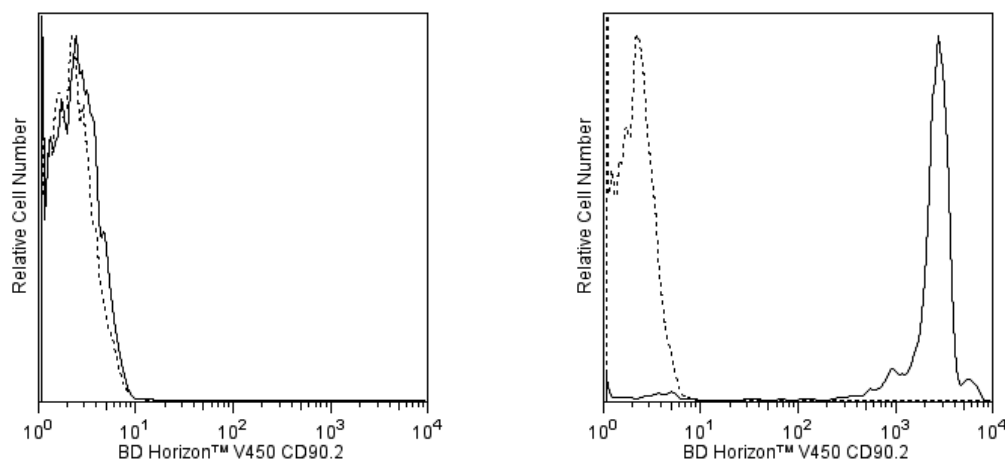
Product Information

Material Number:	561643
Alternate Name:	Thy-1.2; T25; Thymus cell antigen 1, theta
Entrez Gene ID:	21838
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	53-2.1
Immunogen:	Mouse Thymus / Spleen
Isotype:	Rat (LOU) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium azide.

Description

The 53-2.1 monoclonal antibody specifically binds to the CD90.2 (Thy-1.2) alloantigen on thymocytes, most peripheral T lymphocytes, some intraepithelial T lymphocytes (IEL, DEC), epithelial cells, fibroblasts, neurons, hematopoietic stem cells, but not B lymphocytes, of most mouse strains. The 53-2.1 antibody has been reported not to crossreact with Thy-1.1 (e.g., AKR/J, PL), or with rat Thy-1. CD90 is a glycosylphosphatidylinositol-anchored membrane glycoprotein of the Ig superfamily that is involved in signal transduction. In addition, there is evidence that CD90 mediates adhesion of thymocytes to thymic stroma. The 53-2.1 antibody has been reported to block the binding of anti-mouse CD90.2 clone 30-H12 (Cat. No. 553009) to immobilized thymocyte membranes.

The antibody is conjugated to BD Horizon™ V450, which has been developed for use in multicolor flow cytometry experiments and is available exclusively from BD Biosciences. It is excited by the Violet laser Ex max of 406 nm and has an Em Max at 450 nm. Conjugates with BD Horizon™ V450 can be used in place of Pacific Blue™ conjugates.



Flow cytometric analysis of CD90.2 expression on BALB/c or P/J mouse thymocytes. P/J (Left Panel) or Balb/c (Right Panel) mouse thymocytes were stained with either BD Horizon™ V450 Rat Anti-Mouse CD90.2 antibody (Cat. No. 561643; solid line histogram) or with a BD Horizon™ V450 Rat IgG2a, κ Isotype Control (Cat. No. 560377; dashed line histogram). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable thymocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

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 BD Horizon™ V450 under optimum conditions, and unreacted BD Horizon™ V450 was removed.

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Application Notes

Application

Flow cytometry

Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
560377	V450 Rat IgG2a, κ Isotype Control	0.1 mg	R35-95
554656	Stain Buffer (FBS)	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. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
5. BD Horizon™ V450 has a maximum absorption of 406 nm and maximum emission of 450 nm. Before staining with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
6. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
7. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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