

Technical Data Sheet

V450 Rat Anti-Mouse CD45

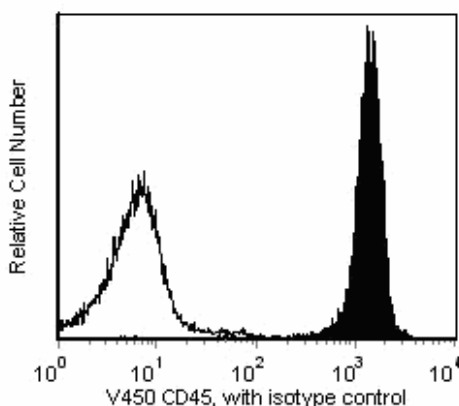
Product Information

Material Number:	560501
Alternate Name:	Ptprc; CD45R; LCA; Leukocyte common antigen; T200; B220; Ly-5; Lyt-4
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	30-F11
Immunogen:	Mouse Thymus / Spleen
Isotype:	Rat (LOU) IgG2b, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing protein stabilizer, glycerol and ≤0.09% sodium azide.

Description

The 30-F11 clone has been reported to react with all isoforms and both alloantigens of CD45, which is found on hematopoietic stem cells and all cells of hematopoietic origin, except erythrocytes. CD45 is a transmembrane glycoprotein which is expressed at high levels on the cell-surface, and its presence distinguishes leukocytes from non-hematopoietic cells. CD45 is a member of the Protein Tyrosine Phosphatase (PTP) family, where the intracellular carboxy-terminal region contains two PTP catalytic domains, and the extracellular region is highly variable due to alternative splicing of exons 4, 5, and 6 (designated as A, B, and C, respectively). CD45 isoforms play complex roles in T-cell and B-cell antigen receptor signal transduction and the CD45 isoforms detected in the mouse are cell type-, maturation-, and activation state-specific.

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.



Analysis of CD45 on mouse splenocytes. Splenocytes from BALB/c mice were stained with the BD Horizon™ V450 Rat Anti-Mouse CD45 antibody (shaded) or with a BD Horizon™ V450 Rat IgG2b, κ isotype control (unshaded). Histograms were derived from gated events based on light scattering characteristics for splenocytes. Flow cytometry was performed on a BD LSR II™ flow cytometry 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.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
560457	V450 Rat IgG2b, κ Isotype Control	0.1 mg	A95-1
554656	Stain Buffer (FBS)	500 ml	(none)

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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. 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.
4. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
5. 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.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.

References

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