

## Technical Data Sheet

## V450 Mouse Anti-Human CD45

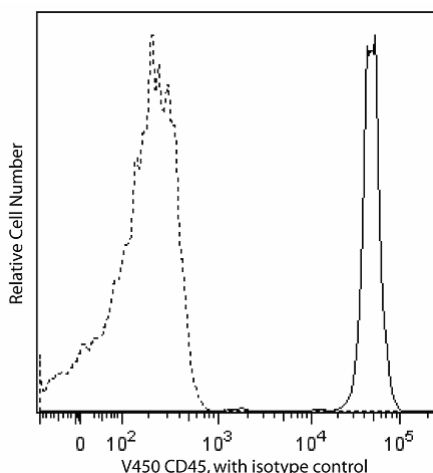
## Product Information

Material Number:	560368
Alternate Name:	Leukocyte Common Antigen
Size:	30 tests
Vol. per Test:	5 µl
Clone:	HI30
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	IV N816
Storage Buffer:	Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium azide.

## Description

Reacts with the 180, 190, 205, 220 kD isoforms of the leukocyte common antigen (LCA) present on all human leukocytes including lymphocytes, monocytes, granulocytes, eosinophils, and thymocytes but absent from circulating erythrocytes, platelets, or mature erythroid cells of bone marrow and non-hemopoietic tissues.

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 human lymphocytes.** Whole blood was stained with BD Horizon™ V450 Mouse Anti-Human CD45 and compared to whole blood stained with BD Horizon™ V450 Mouse IgG1, κ Isotype Control (clone MOPC-21, Cat. No. 560373). The isotype control is represented by a dashed line and the V450 Mouse Anti-Human CD45 by the solid line. Lymphocytes were selected by light scatter profile. Flow cytometry was performed on a BD LSR™ II 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 BD Horizon™ V450 under optimum conditions, and unreacted BD Horizon™ V450 was 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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## Suggested Companion Products

Catalog Number	Name	Size	Clone
560373	V450 Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21

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## Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use  $1 \times 10^6$  cells in a 100- $\mu$ l experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to [www.bdbiosciences.com/pharming/en/protocols](http://www.bdbiosciences.com/pharming/en/protocols) for technical protocols.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/colors](http://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. 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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Loken MR, Brosnan JM, Bach BA, Ault KA. Establishing optimal lymphocyte gates for immunophenotyping by flow cytometry. *Cytometry*. 1990; 11(4):453-459. (Biology)  
Terstappen LW, Levin J. Bone marrow cell differential counts obtained by multidimensional flow cytometry. *Blood Cells*. 1992; 18(2):311-330.(Biology)  
Trowbridge IS, Thomas ML. CD45: an emerging role as a protein tyrosine phosphatase required for lymphocyte activation and development. *Annu Rev Immunol*. 1994; 12:85-116.(Biology)