

## Technical Data Sheet

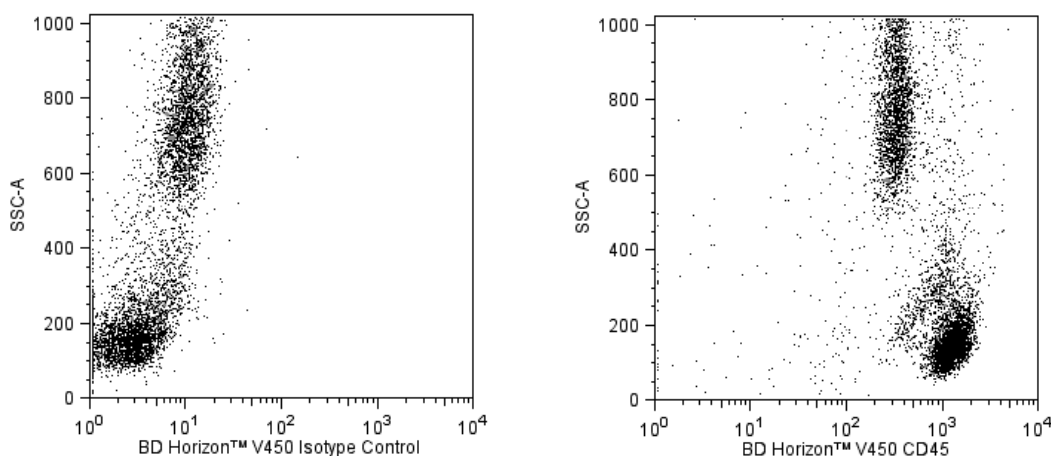
**V450 Mouse Anti-NHP CD45****Product Information**

<b>Material Number:</b>	<b>561291</b>
<b>Alternate Name:</b>	Pan Leukocyte, NHP-specific
<b>Size:</b>	50 tests
<b>Vol. per Test:</b>	5 µl
<b>Clone:</b>	D058-1283
<b>Immunogen:</b>	Rhesus peripheral whole blood
<b>Isotype:</b>	Mouse IgG1, κ
<b>Reactivity:</b>	QC Testing: Rhesus, Baboon, or Cynomolgus
<b>Workshop:</b>	NA
<b>Storage Buffer:</b>	Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium azide.

**Description**

D058-1283 is a CD45 monoclonal antibody specific for non-human primate leukocytes, developed using Rhesus peripheral whole blood as immunogen. It does not cross react with human leukocytes. This antibody reacts with Baboon, Rhesus and Cynomolgus Macaque leukocytes in a similar pattern as seen with CD45 binding to the Leukocyte Common Antigen on human cells. Immunophenotypic analysis shows that D058-1283 binds to lymphocytes, monocytes and granulocytes of non-human primate blood samples. This antibody is able to block the binding of monoclonal antibody TŪ116; a reported anti-human CD45 that cross-reacts with non-human primate leukocytes. In Western blot analysis D058-1283 identifies a band of approximate molecular weight 180-200 kDa.

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 CD45 expression on Rhesus macaque peripheral blood leukocytes.** Rhesus macaque whole blood was stained with BD Horizon™ V450 Mouse anti-NHP CD45 antibody (Cat. No. 561291; Right Panel) or with a BD Horizon™ V450 Mouse IgG1, κ Isotype Control (Cat. No. 560373; Left Panel). The erythrocytes were lysed with BD PharmLyse™ Lysing Buffer (Cat. No. 555899). Two parameter flow cytometric dot blots showing the correlated expression of CD45 (or Ig Isotype control staining) versus side-scattered light signals were derived from events with the forward light scatter signals of viable leukocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

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## 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, $\kappa$ Isotype Control	0.1 mg	MOPC-21
555899	Lysing Buffer	100 ml	(none)
554656	Stain Buffer (FBS)	500 ml	(none)

## 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. An isotype control should be used at the same concentration as the antibody of interest.
3. Please refer to [www.bdbiosciences.com/pharmlngen/protocols](http://www.bdbiosciences.com/pharmlngen/protocols) for technical protocols.
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. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
6. 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.
7. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.

## References

Kishihara K, Penninger J, Wallace VA, et al. Normal B lymphocyte development but impaired T cell maturation in CD45-exon6 protein tyrosine phosphatase-deficient mice. *Cell*. 1993; 74(1):143-156. (Biology)

Knapp W, Dorken B, Rieber EP, et al, ed. *Leucocyte Typing IV*. New York: Oxford University Press; 1989:1-1208. (Biology)

Reimann KA, Waite BC, Lee-Parritz DE, et al. Use of human leukocyte-specific monoclonal antibodies for clinically immunophenotyping lymphocytes of rhesus monkeys. *Cytometry*. 1994; 17(1):102-108. (Biology)