

## Technical Data Sheet

## V450 Mouse Anti-Human CD14

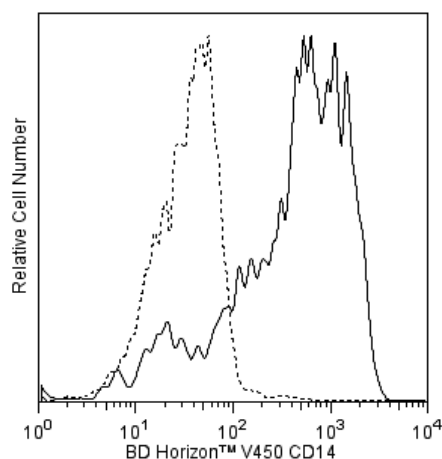
## Product Information

<b>Material Number:</b>	<b>561390</b>
<b>Alternate Name:</b>	LPS receptor; LPS-R; Myeloid cell-specific leucine-rich glycoprotein
<b>Size:</b>	50 tests
<b>Vol. per Test:</b>	5 µl
<b>Clone:</b>	M5E2
<b>Isotype:</b>	Mouse IgG2a, κ
<b>Reactivity:</b>	Human
	QC Testing: Rhesus or Cynomolgus
<b>Workshop:</b>	III 329
<b>Storage Buffer:</b>	Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium azide.

## Description

The M5E2 monoclonal antibody specifically binds to CD14, a 53-55 kDa glycosylphosphatidylinositol (GPI)-anchored single chain glycoprotein expressed at high levels on monocytes. Additionally, the anti-CD14 antibody reacts with interfollicular macrophages, reticular dendritic cells, and some Langerhans cells. CD14 has been identified as a high affinity cell-surface receptor for complexes of lipopolysaccharide (LPS) and serum LPS-binding protein, LPB.

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 CD14 expression on Rhesus macaque peripheral blood monocytes.** Rhesus macaque whole blood was stained with the BD Horizon™ V450 Mouse anti-Human CD14 antibody (Cat. No. 561390; solid line histogram) or with a BD Horizon™ V450 Mouse IgG2a, κ Isotype Control (Cat. No. 560550; dashed line histogram). The erythrocytes were lysed with BD PharmLyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable monocytes. 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.

## Application Notes

## Application

Flow cytometry	Routinely Tested
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## Suggested Companion Products

Catalog Number	Name	Size	Clone
555899	Lysing Buffer	100 ml	(none)
560550	V450 Mouse IgG2a, κ Isotype Control	0.1 mg	G155-178
554656	Stain Buffer (FBS)	500 ml	(none)

## BD Biosciences

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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. 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. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
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. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.

## References

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

McMichael AJ, Beverly PCL, Gilks W, et al, ed. *Leukocyte Typing III: White Cell Differentiation Antigens*. New York: Oxford University Press; 1987. (Biology)

Wright SD, Ramos RA, Tobias PS, Ulevitch RJ, Mathison JC. CD14, a receptor for complexes of lipopolysaccharide (LPS) and LPS binding protein. *Science*. 1990; 249(4975):1431-1433. (Biology)