Technical Data Sheet

V450 Mouse Anti-Human CD200

Product Information

Material Number: 562126

Alternate Name: OX-2; MOX1; MOX2; My033

Size 50 tests Vol. per Test: 5 μ1

MRC OX-104 Clone: Mouse IgG1, κ Isotype: Reactivity: QC Testing: Human

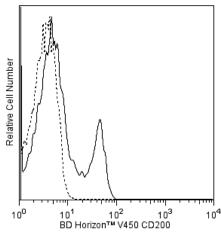
Workshop: VII 70655

Storage Buffer: Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium

Description

The MRC OX-104 monoclonal antibody specifically binds to CD200. CD200 is a 40-45 kDa type 1 transmembrane glycoprotein and is also referred to as OX2. CD200 is a member of the immunoglobulin superfamily of proteins. It contains two Ig domains, a single transmembrane region and a short cytoplasmic tail. CD200 is expressed on resting and PMA-activated T- and B-cells, but not on NK cells, monocytes, granulocytes, or platelets. It has been found on a subset of CD34+ progenitor cells. Interaction of CD200 with its receptor on macrophages induces a downregulation of macrophage activity in a variety of tissues, suggesting a regulatory function.

The antibody is conjugated to BD HorizonTM 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 HorizonTM V450 can be used in place of Pacific BlueTM conjugates.



Flow cytometric analysis of CD200 expression on human peripheral blood lymphocytes. Whole blood was stained with either BD Horizon™ V450 Mouse Anti-Human CD200 antibody (Cat. No. 562126; solid line histogram) or with a BD Horizon™ V450 Mouse IgG1, κ Isotype Control (Cat. No. 560373; dashed line histogram). The erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable lymphocytes. 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

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Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
560373	V450 Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21
555899	Lysing Buffer	100 ml	(none)
554656	Stain Buffer (FBS)	500 ml	(none)

BD Biosciences

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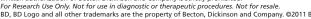
United States Europe Japan 877.232.8995 888.268.5430 32.53.720.550 0120.8555.90 65.6861.0633 0800.771.7157

For country-specific contact information, visit bdbiosciences.com/how_to_order/

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Product Notices

- This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10⁶ cells in a 100-μl experimental sample (a test).
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 3. An isotype control should be used at the same concentration as the antibody of interest.
- 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.
- 6. BD HorizonTM 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.
- Pacific BlueTM is a trademark of Molecular Probes, Inc., Eugene, OR.

References

Hoek RM, Ruuls SR, Murphy CA, et al. Down-regulation of the macrophage lineage through interaction with OX2 (CD200). Science. 2000; 290(5497):1768-1771. (Biology)

Mason D, Andre P, Bensussan A, ed. Leukocyte Typing VII. New York: Oxford University Press; 2002. (Clone-specific)

Wright GJ, Jones M, Puklavec MJ, Brown MH, Barclay AN. The unusual distribution of the neuronal/lymphoid cell surface CD200 (OX2) glycoprotein is conserved in humans. *Immunology*. 2001; 102(2):173-179. (Biology)

Wright GJ, Puklavec MJ, Willis AC, et al. Lymphoid/neuronal cell surface OX2 glycoprotein recognizes a novel receptor on macrophages implicated in the control of their function. *Immunity*. 2000; 13(2):233-242. (Biology)

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