

A6-746-T100

Monoclonal Antibody to CD200 Alexa Fluor® 647 conjugated (100 tests)

Clone: OX-104

Isotype: Mouse IgG1

- Specificity: The mouse monoclonal antibody OX-104 recognizes CD200, a type-1 glycoprotein of the immunoglobulin superfamily, which is expressed in neurons, B and T cell subsets, keratinocytes, follicular dendritic cells, and ovarian cells. HLDA VII; WS Code 70655
- Immunogen: Human CD200

Species Reactivity: Human

- **Preparation:** The purified antibody is conjugated with Alexa Fluor® 647 under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
- **Storage Buffer:** The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
- **Storage / Stability:** Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
- **Usage:** The reagent is designed for Flow Cytometry analysis of human blood cells using 4 μ l reagent / 100 μ l of whole blood or 10⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.
- Expiration: See vial label
- Lot Number: See vial label
- **Background:** CD200 (also known as OX2 or MRC) is a type-1 membrane glycoprotein, which contains two extracellular immunoglobulin domains, transmembrane domain and cytoplasmic domain. It is expressed by neuronal cells, B and T cell subsets, follicular dendritic cells, keratinocytes, and ovarian cells. The interaction between CD200 and its receptor CD200R results in macrophage activation (IL-6 production), inhibition of mast cell degranulation along with reduced TNF-alpha and IL-13 secretion and overall attenuation of the activation status of lymphocytes. It seems CD200 is also involved in maternal tolerance and its decreased expression in hair follicel correlates with follicular miniaturization.

For laboratory research only, not for drug, diagnostic or other use.



Antibodies

References:

*Sopp P, Werling D, Baldwin C: Sopp P, Werling D, Baldwin C: Vet Immunol Immunopathol. 2007 Sep 15;119(1-2):106-14

*Li Y, Zhao LD, Tong LS, Qian SN, Ren Y, Zhang L, Ding X, Chen Y, Wang YX, Zhang W, Zeng XF, Zhang FC, Tang FL, Zhang X, Ba DN, He W, Cao XT, Lipsky PE: Aberrant CD200/CD200R1 expression and function in systemic lupus erythematosus contributes to abnormal T-cell responsiveness and dendritic cell activity. Arthritis Res Ther. 2012 May 23;14(3):R123. doi: 10.1186/ar3853.

*Shiratori I, Yamaguchi M, Suzukawa M, Yamamoto K, Lanier LL, Saito T, Arase H: Down-regulation of basophil function by human CD200 and human herpesvirus-8 CD200. J Immunol. 2005 Oct 1;175(7):4441-9. *Colmont CS, Benketah A, Reed SH, Hawk NV, Telford WG, Ohyama M, Udey

*Colmont CS, Benketah A, Reed SH, Hawk NV, Telford WG, Ohyama M, Udey MC, Yee CL, Vogel JC, Patel GK: CD200-expressing human basal cell carcinoma cells initiate tumor growth. Proc Natl Acad Sci U S A. 2013 Jan 22;110(4):1434-9.

*Foster-Cuevas M, Wright GJ, Puklavec MJ, Brown MH, Barclay AN: Human herpesvirus 8 K14 protein mimics CD200 in down-regulating macrophage activation through CD200 receptor. J Virol. 2004 Jul;78(14):7667-76.

*Meuth SG, Simon OJ, Grimm A, Melzer N, Herrmann AM, Spitzer P, Landgraf P, Wiendl H: CNS inflammation and neuronal degeneration is aggravated by impaired CD200-CD200R-mediated macrophage silencing. J Neuroimmunol. 2008 Feb;194(1-2):62-9.

*Garza LA, Yang CC, Zhao T, Blatt HB, Lee M, He H, Stanton DC, Carrasco L, Spiegel JH, Tobias JW, Cotsarelis G: Bald scalp in men with androgenetic alopecia retains hair follicle stem cells but lacks CD200-rich and CD34-positive hair follicle progenitor cells. J Clin Invest. 2011 Feb;121(2):613-22

This product is provided under an agreement between Molecular Probes, Inc. (a wholly owned subsidiary of Invitrogen Corporation), and Exbio Praha, a.s., and the manufacture, use, sale or import of this product may be subject to one or more U.S. patents, pending applications, and corresponding non-U.S. equivalents, owned by Molecular Probes, Inc. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product in research conducted by the buyer (whether the buyer is an academic or for-profit entity), including use in flow cytometry that does not utilize a bead based array, but excluding use in combination with microarrays or High Content Screening. The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes. Commercial Purposes means any activity by a party for consideration and may include, but is not limited to: (1) use of the product or its components in manufacturing; (2) use of the product or its components to provide a service, information, or data; (3) use of the product or its components for therapeutic, diagnostic or prophylactic purposes; or (4) resale of the product or its components, whether or not such product or its components are resold for use in research. For information on purchasing a license to this product for any other use, contact Molecular Probes, Inc., Business Development, 29851 Willow Creek Road, Eugene, OR 97402, USA, Tel: (541) 465-8300. Fax: (541) 335-0504.

For laboratory research only, not for drug, diagnostic or other use.