

1F-746-T100

Monoclonal Antibody to CD200 Fluorescein (FITC) 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 Fluorescein isothiocyanate (FITC) under

optimum conditions. The reagent is free of unconjugated FITC 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

μl reagent / 100 μl 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 follicle correlates with follicular miniaturization.



PRODUCT DATA SHEET

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.

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 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