

1P-746-T100

## Monoclonal Antibody to CD200 Phycoerythrin (PE) conjugated (100 tests)

<b>Clone:</b>	OX-104
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	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
<b>Immunogen:</b>	Human CD200
<b>Species Reactivity:</b>	Human
<b>Preparation:</b>	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
<b>Storage Buffer:</b>	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
<b>Storage / Stability:</b>	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.
<b>Usage:</b>	The reagent is designed for Flow Cytometry analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	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.

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

**Antibodies****References:**

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- \*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.
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- \*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

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