

OX2 (C-15): sc-14384

BACKGROUND

OX2 (CD200, MOX2), a member of the immunoglobulin superfamily (IgSF), is a 248 residue cell surface glycoprotein that is expressed in lymphoid cells, neurons and endothelium. OX2 receptor (OX2R) is a membrane protein with up to 70% of its weight derived from N-linked glycosylation; it is primarily expressed in lymphoid and neuronal tissue. Phylogenetic analysis of OX2R with respect to other leukocyte IgSF glycoproteins suggests that OX2R and OX2 share a common ancestral protein. The cytoplasmic portion of OX2R contains NPXY motifs that are known to interact with PTB/PID binding domains. The interaction between OX2 and OX2R may contribute to pathways that suppress and limit macrophage induced inflammatory damage in tissue.

REFERENCES

1. McCaughan, G.W., Clark, M.J., Hurst, J., Grosveld, F. and Barclay, A.N. 1987. The gene for MRC OX2 membrane glycoprotein is localized on human chromosome 3. *Immunogenetics* 25: 133-135.
2. Wright, G.J., Puklavec, M.J., Willis, A.C., Hoek, R.M., Sedgwick, J.D., Brown, M.H. and Barclay, A.N. 2000. Lymphoid/neuronal cell surface OX2 glycoprotein recognizes a novel receptor on macrophages implicated in the control of their function. *Immunity* 13: 233-242.
3. Hoek, R.M., Ruuls, S.R., Murphy, C.A., Wright, G.J., Goddard, R., Zurawski, S.M., Blom, B., Homola, M.E., Streit, W.J., Brown, M.H., Barclay, A.N. and Sedgwick, J.D. 2000. Down-regulation of the macrophage lineage through interaction with OX2 (CD200). *Science* 290: 1768-1771.
4. Gorczynski, R.M., Yu, K. and Clark, D. 2000. Receptor engagement on cells expressing a ligand for the tolerance-inducing molecule OX2 induces an immunoregulatory population that inhibits alloreactivity *in vitro* and *in vivo*. *J. Immunol.* 165: 4854-4860.
5. Dick, A.D., Broderick, C., Forrester, J.V. and Wright, G.J. 2001. Distribution of OX2 antigen and OX2 receptor within retina. *Invest. Ophthalmol. Vis. Sci.* 42: 170-176.

CHROMOSOMAL LOCATION

Genetic locus: CD200 (human) mapping to 3q13.2; Cd200 (mouse) mapping to 16 B5.

SOURCE

OX2 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of OX2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-14384 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

OX2 (C-15) is recommended for detection of OX2 glycoprotein of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for OX2 siRNA (h): sc-42954, OX2 siRNA (m): sc-42955, OX2 shRNA Plasmid (h): sc-42954-SH, OX2 shRNA Plasmid (m): sc-42955-SH, OX2 shRNA (h) Lentiviral Particles: sc-42954-V and OX2 shRNA (m) Lentiviral Particles: sc-42955-V.

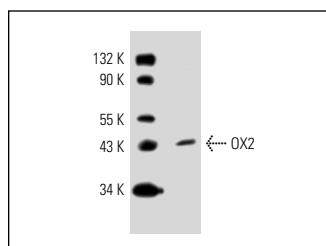
Molecular Weight of OX2: 41-47 kDa.

Positive Controls: J774.A1 cell lysate: sc-3802, mouse brain extract: sc-2253 or CCRF-CEM cell lysate: sc-2225.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



OX2 (C-15): sc-14384. Western blot analysis of OX2 expression in J774.A1 whole cell lysate.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS
Satisfaction
Guaranteed

Try **OX2 (OX90): sc-53100**, our highly recommended monoclonal alternative to OX2 (C-15).