SANTA CRUZ BIOTECHNOLOGY, INC.

OX2 (1.BB.648): sc-71762

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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, and it is primarily expressed in lymphoid and neuronal tissue. Phylogenetic analysis of OX2R with respect to other leukocyte IgSF glycoproteins suggests that OXR2 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

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6. 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.
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8. Nathan, C. and Muller, W.A. 2001. Putting the brakes on innate immunity: a regulatory role for CD200. Nat. Immunol. 2: 17-19.
9. Broderick, C., Hoek, R.M., Forrester, J.V., Liversidge, J., Sedgwick, J.D. and Dick, A.D. 2002. Constitutive retinal CD200 expression regulates resident microglia and activation state of inflammatory cells during experimental autoimmune uveoretinitis. Am. J. Pathol. 161: 1669-1677.

CHROMOSOMAL LOCATION

Genetic locus: Cd200 (mouse) mapping to 16 B5.

RESEARCH USE

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

SOURCE

OX2 (1.BB.648) is a mouse monoclonal antibody raised against full length OX2 of rat origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

OX2 (1.BB.648) is available conjugated to either phycoerythrin (sc-71762 PE) or fluorescein (sc-71762 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

OX2 (1.BB.648) is recommended for detection of a monomorphic determinant of OX2 of mouse and rat origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

Suitable for use as control antibody for OX2 siRNA (m): sc-42955, OX2 siRNA (r): sc-270249, OX2 shRNA Plasmid (m): sc-42955-SH, OX2 shRNA Plasmid (r): sc-270249-SH, OX2 shRNA (m) Lentiviral Particles: sc-42955-V and OX2 shRNA (r) Lentiviral Particles: sc-270249-V.

Molecular Weight of OX2: 41-47 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

SELECT PRODUCT CITATIONS

1. Cai, B., Li, M., Zheng, Y., Yin, Y., Jin, F., Li, X., Dong, J., Jiao, X., Liu, X., Zhang, K., Li, D., Wang, J. and Yin, G. 2020. EZH2-mediated inhibition of microRNA-22 promotes differentiation of hair follicle stem cells by elevating STK40 expression. Aging 12: 12726-12739.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.