Z39lg (Q-25): sc-134155



The Power to Question

BACKGROUND

Cell adhesion molecules (CAMs) influence cell growth, differentiation, embryogenesis, immune response and cancer metastasis by networking information from the extracellular matrix to the cell. The four major families of cell adhesion molecules are immunoglobulin (Ig) superfamily (calcium-independent transmembrane glycoproteins), integrins (transmembrane non-covalently linked heterodimers of α and β subunits), calcium-dependent cadherins and divalent cation-dependent selectins. Regulation of neuronal synaptic adhesion by CAMs has proven important for learning and memory. Proper embryonic morphogenic development is also heavily dependent on the regulation of cell adhesion molecules. Mutation of CAM genes has been linked to several forms of cancer, effecting tumor growth and metastasis. Z39lg is an Ig domain cell adhesion molecule detected in all human tissue but mainly expressed in fetal human tissues, adult lungs and placenta. The Z39lg gene is localized in the pericentromeric region of human chromosome X.

REFERENCES

- Langnaese, K., Colleaux, L., Kloos, D.U., Fontes, M. and Wieacker, P. 2000. Cloning of Z39lg, a novel gene with immuno-globulin-like domains located on human chromosome X. Biochim. Biophys. Acta 1492: 522-525.
- Walker, M.G. 2002. Z39lg is coexpressed with activated macrophage genes. Biochim. Biophys. Acta 1574: 387-390.
- Ahn, J.H., Lee, Y., Jeon, C., Lee, S.J., Lee, B.H., Choi, K.D. and Bae, Y.S. 2002. Identification of the genes differentially expressed in human dendritic cell subsets by cDNA subtraction and microarray analysis. Blood 100: 1742-1754.
- Kim, J.K., Choi, E.M., Shin, H.I., Kim, C.H., Hwang, S.H., Kim, S.M. and Kwon, B.S. 2005. Characterization of monoclonal antibody specific to the Z39lg protein, a member of immunoglobulin superfamily. Immunol. Lett. 99: 153-161.
- Lee, M.Y., Kim, W.J., Kang, Y.J., Jung, Y.M., Kang, Y.M., Suk, K., Park, J.E., Choi, E.M., Choi, B.K., Kwon, B.S. and Lee, W.H. 2006. Z39lg is expressed on macrophages and may mediate inflammatory reactions in arthritis and atherosclerosis. J. Leukoc. Biol. 80: 922-928.
- Vogt, L., Schmitz, N., Kurrer, M.O., Bauer, M., Hinton, H.I., Behnke, S., Gatto, D., Sebbel, P., Beerli, R.R., Sonderegger, I., Kopf, M., Saudan, P. and Bachmann, M.F. 2006. VSIG4, a B7 family-related protein, is a negative regulator of T cell activation. J. Clin. Invest. 116: 2817-2826.
- 7. Zang, X. and Allison, J.P. 2006. To be or not to be B7. J. Clin. Invest. 116: 2590-2593.
- Helmy, K.Y., Katschke, K.J., Jr, Gorgani, N.N., Kljavin, N.M., Elliott, J.M., Diehl, L., Scales, S.J., Ghilardi, N. and van Lookeren Campagne, M. 2006. CRIg: a macrophage complement receptor required for phagocytosis of circulating pathogens. Cell 124: 915-927.
- Wiesmann, C., Katschke, K.J., Yin, J., Helmy, K.Y., Steffek, M., Fairbrother, W.J., McCallum, S.A., Embuscado, L., DeForge, L., Hass, P.E. and van Lookeren Campagne, M. 2006. Structure of C3b in complex with CRIg gives insights into regulation of complement activation. Nature 444: 217-220.

CHROMOSOMAL LOCATION

Genetic locus: VSIG4 (human) mapping to Xq12.

SOURCE

Z39lg (Q-25) is a Protein A purified rabbit polyclonal antibody raised against synthetic Z39lg peptide of human origin.

PRODUCT

Each vial contains 100 μ g lgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

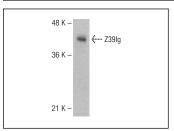
Z39lg (Q-25) is recommended for detection of Z39lg of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Z39lg siRNA (h): sc-72190, Z39lg shRNA Plasmid (h): sc-72190-SH and Z39lg shRNA (h) Lentiviral Particles: sc-72190-V.

Molecular Weight of Z39lg: 46 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

DATA



Z39lg (Q-25): sc-134155. Western blot analysis of Z39lg expression in Jurkat whole cell lysate.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**