



# CD164 (m): 293T Lysate: sc-119096

## BACKGROUND

CD164 is a mucin-like cell surface glycoprotein that facilitates adhesion of CD34<sup>+</sup> cells and serves as a negative regulator of hematopoietic progenitor cell proliferation. Human CD164 in CD34<sup>+</sup>CD38<sup>+</sup> hematopoietic progenitor and epithelial cell lines localizes to endosomes and lysosomes, with low concentrations also appearing at the cell surface.

## REFERENCES

1. Watt, S.M., Bühring, H.J., Rappold, I., Chan, J.Y., Lee-Prudhoe, J., Jones, T., Zannettino, A.C., Simmons, P.J., Doyonnas, R., Sheer, D. and Butler, L.H. 1998. CD164, a novel sialomucin on CD34<sup>+</sup> and erythroid subsets, is located on human chromosome 6q21. *Blood* 92: 849-866.
2. Doyonnas, R., Yi-Hsin Chan, J., Butler, L.H., Rappold, I., Lee-Prudhoe, J.E., Zannettino, A.C., Simmons, P.J., Bühring, H.J., Levesque, J.P. and Watt, S.M. 2000. CD164 monoclonal antibodies that block hemopoietic progenitor cell adhesion and proliferation interact with the first mucin domain of the CD164 receptor. *J. Immunol.* 165: 840-851.
3. Watt, S.M., Butler, L.H., Tavian, M., Bühring, H.J., Rappold, I., Simmons, P.J., Zannettino, A.C., Buck, D., Fuchs, A., Doyonnas, R., Chan, J.Y., Levesque, J.P., Peault, B. and Roxanis, I. 2000. Functionally defined CD164 epitopes are expressed on CD34<sup>+</sup> cells throughout ontogeny but display distinct distribution patterns in adult hematopoietic and nonhematopoietic tissues. *Blood* 95: 3113-3124.
4. Chan, J.Y., Lee-Prudhoe, J.E., Jorgensen, B., Ihrke, G., Doyonnas, R., Zannettino, A.C., Buckle, V.J., Ward, C.J., Simmons, P.J. and Watt, S.M. 2001. Relationship between novel isoforms, functionally important domains, and subcellular distribution of CD164/endolyn. *J. Biol. Chem.* 276: 2139-2152.
5. Lee, Y.N., Kang, J.S. and Krauss, R.S. 2001. Identification of a role for the sialomucin CD164 in myogenic differentiation by signal sequence trapping in yeast. *Mol. Cell. Biol.* 21: 7696-7706.
6. McGuckin, C.P., Forraz, N., Baradez, M.O., Lojo-Rial, C., Wertheim, D., Whiting, K., Watt, S.M. and Pettengell, R. 2003. Colocalization analysis of sialomucins CD34 and CD164. *Stem Cells* 21: 162-170.
7. Jorgensen-Tye, B., Levesque, J.P., Royle, L., Doyonnas, R., Chan, J.Y., Dwek, R.A., Rudd, P.M., Harvey, D.J., Simmons, P.J. and Watt, S.M. 2005. Epitope recognition of antibodies that define the sialomucin, endolyn (CD164), a negative regulator of haematopoiesis. *Tissue Antigens* 65: 220-239.
8. Havens, A.M., Jung, Y., Sun, Y.X., Wang, J., Shah, R.B., Bühring, H.J., Pienta, K.J. and Taichman, R.S. 2006. The role of sialomucin CD164 (MGC-24v or endolyn) in prostate cancer metastasis. *BMC Cancer* 6: 195.
9. Bae, G.U., Gaio, U., Yang, Y.J., Lee, H.J., Kang, J.S. and Krauss, R.S. 2008. Regulation of myoblast motility and fusion by the CXCR4-associated sialomucin, CD164. *J. Biol. Chem.* 283: 8301-8309.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## CHROMOSOMAL LOCATION

Genetic locus: Cd164 (mouse) mapping to 10 B2.

## PRODUCT

CD164 (m): 293T Lysate represents a lysate of mouse CD164 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

CD164 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive CD164 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.