

CD164 (H-123): sc-33124

BACKGROUND

CD164 is a mucin-like cell surface glycoprotein that facilitates adhesion of CD34⁺ cells and serves as a negative regulator of hematopoietic progenitor cell proliferation. Human CD164 in CD34⁺CD38⁺ 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., et al. 1998. CD164, a novel sialomucin on CD34⁺ and erythroid subsets, is located on human chromosome 6q21. *Blood* 92: 849-866.
2. Doyonnas, R., et al. 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., et al. 2000. Functionally defined CD164 epitopes are expressed on CD34⁺ cells throughout ontogeny but display distinct distribution patterns in adult hematopoietic and nonhematopoietic tissues. *Blood* 95: 3113-3124.
4. Chan, J.Y., et al. 2001. Relationship between novel isoforms, functionally important domains, and subcellular distribution of CD164/endolyn. *J. Biol. Chem.* 276: 2139-2152.
5. Lee, Y.N., et al. 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., et al. 2003. Colocalization analysis of sialomucins CD34 and CD164. *Stem Cells* 21: 162-170.
7. Jorgensen-Tye, B., et al. 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., et al. 2006. The role of sialomucin CD164 (MGC-24v or endolyn) in prostate cancer metastasis. *BMC Cancer* 6: 195.

CHROMOSOMAL LOCATION

Genetic locus: CD164 (human) mapping to 6q21; Cd164 (mouse) mapping to 10 B2.

SOURCE

CD164 (H-123) is a rabbit polyclonal antibody raised against amino acids 1-123 mapping at the N-terminus of CD164 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.

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.

APPLICATIONS

CD164 (H-123) is recommended for detection of CD164 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 CD164 siRNA (h): sc-44677, CD164 siRNA (m): sc-44678, CD164 shRNA Plasmid (h): sc-44677-SH, CD164 shRNA Plasmid (m): sc-44678-SH, CD164 shRNA (h) Lentiviral Particles: sc-44677-V and CD164 shRNA (m) Lentiviral Particles: sc-44678-V.

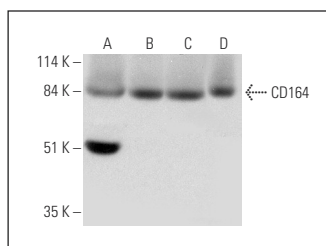
Molecular Weight of CD164: 80 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, TF-1 cell lysate: sc-2412 or U-937 cell lysate: sc-2239.

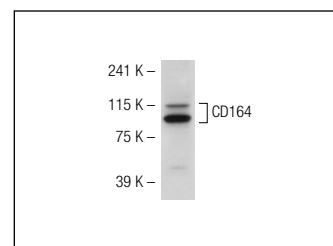
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CD164 (H-123): sc-33124. Western blot analysis of CD164 expression in C2C12 (A), TF-1 (B) and U-937 (C) whole cell lysates and mouse bone marrow tissue extract (D).



CD164 (H-123): sc-33124. Western blot analysis of CD164 expression in NIH/3T3 whole cell lysate.

PROTOCOLS

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



Try **CD164 (H-4): sc-271179**, our highly recommended monoclonal alternative to CD164 (H-123).