

MAN2C1 (C-17): sc-66458

BACKGROUND

Misfolded glycoproteins are deglycosylated by the peptide N-glycanase during the degradation process. Free oligosaccharides released by N-glycanase are catabolized by cytosolic MAN2C1, also designated α -mannosidase 2C1. MAN2C1, a member of the glycosyl hydrolase 38 family, can cleave α 1,2-linked, α 1,3-linked and α 1,6-linked mannose residues and is stimulated by cobalt. The furanose analogs, swainsonine (SW) and 1,4-dideoxy-1,4-imino-d-mannitol (DIM), are known inhibitors of MAN2C1. The inhibition of MAN2C1 can enhance the adhesion of Jurkat T cells, showing a cytoskeletal rearrangement of the cells.

REFERENCES

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3. McDaniel, A.H., Li, X., Tordoff, M.G., Bachmanov, A.A. and Reed, D.R. 2006. A locus on mouse chromosome 9 (Adip5) affects the relative weight of the gonadal but not retroperitoneal adipose depot. *Mamm. Genome* 17: 1078-1092.
4. Suzuki, T., Hara, I., Nakano, M., Shigeta, M., Nakagawa, T., Kondo, A., Funakoshi, Y. and Taniguchi, N. 2006. MAN2C1, an α -mannosidase, is involved in the trimming of free oligosaccharides in the cytosol. *Biochem. J.* 400: 33-41.
5. Costanzi, E., Balducci, C., Cacan, R., Duvet, S., Orlacchio, A. and Beccari, T. 2006. Cloning and expression of mouse cytosolic α -mannosidase (MAN2C1). *Biochim. Biophys. Acta* 1760: 1580-1586.

CHROMOSOMAL LOCATION

Genetic locus: MAN2C1 (human) mapping to 15q24.2; Man2c1 (mouse) mapping to 9 B.

SOURCE

MAN2C1 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MAN2C1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-66458 P, (100 μ g 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

MAN2C1 (C-17) is recommended for detection of MAN2C1 of mouse, rat and 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)], 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).

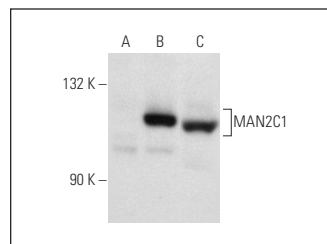
MAN2C1 (C-17) is also recommended for detection of MAN2C1 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for MAN2C1 siRNA (h): sc-62596, MAN2C1 siRNA (m): sc-62597, MAN2C1 shRNA Plasmid (h): sc-62596-SH, MAN2C1 shRNA Plasmid (m): sc-62597-SH, MAN2C1 shRNA (h) Lentiviral Particles: sc-62596-V and MAN2C1 shRNA (m) Lentiviral Particles: sc-62597-V.

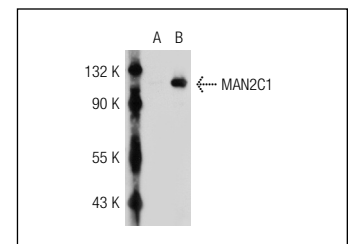
Molecular Weight of MAN2C1: 116 kDa.

Positive Controls: MAN2C1 (h): 293T Lysate: sc-111434, MAN2C1 (m): 293T Lysate: sc-121498 or NIH/3T3 whole cell lysate: sc-2210.

DATA



MAN2C1 (C-17): sc-66458. Western blot analysis of MAN2C1 expression in non-transfected 293T: sc-117752 (A), mouse MAN2C1 transfected 293T: sc-121498 (B) and NIH/3T3 (C) whole cell lysates.



MAN2C1 (C-17): sc-66458. Western blot analysis of MAN2C1 expression in non-transfected: sc-117752 (A) and human MAN2C1 transfected: sc-111434 (B) 293T whole cell lysates.

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.



Try **MAN2C1 (C-4): sc-377132** or **MAN2C1 (G-8): sc-271088**, our highly recommended monoclonal alternatives to MAN2C1 (C-17).