SANTA CRUZ BIOTECHNOLOGY, INC.

MAN2C1 (H-300): sc-67289



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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- Shi, Y., Tian, Y., Zhou, Y.Q., Ju, J.Y., Qu, L., Chen, S.L., Xiang, Z.G., Liu, Y. and Zhu, L.P. 2007. Inhibition of malignant activities of nasopharyngeal carcinoma cells with high expression of CD44 by siRNA. Oncol. Rep. 18: 397-403.

CHROMOSOMAL LOCATION

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

SOURCE

MAN2C1 (H-300) is a rabbit polyclonal antibody raised against amino acids 741-1040 mapping at the C-terminus of MAN2C1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

MAN2C1 (H-300) 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 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).

MAN2C1 (H-300) is also recommended for detection of MAN2C1 in additional species, including equine 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: Hep G2 cell lysate: sc-2227, Jurkat whole cell lysate: sc-2204 or BJAB whole cell lysate: sc-2207.

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.

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.

MONOS Satisfation Guaranteed

Try MAN2C1 (C-4): sc-377132 or MAN2C1 (G-8): sc-271088, our highly recommended monoclonal alternatives to MAN2C1 (H-300).