

MANEA (G-14): sc-161106

BACKGROUND

MANEA (mannosidase, endo- α), also known as Mandaselin, glycoprotein endo- α -1,2-mannosidase, endomannosidase or ENDO, is a 462 amino acid single-pass type II membrane protein of the Golgi apparatus that cleaves the α -1,2-mannosidic bonds linking mono-, di- and triglycosylmannose oligosaccharides to high-mannose glycans, thereby catalyzing their release. A member of the glycosyl hydrolase 99 family and subject to C-terminal post-translational proteolytic cleavage, MANEA is highly expressed in kidney and liver, with lower levels of expression in brain, placenta, lung, muscle, heart and pancreas. The gene encoding MANEA maps to human chromosome 6q16.1, and is considered a potential candidate in cocaine-induced paranoia (CIP).

REFERENCES

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2. Herscovics, A. 1999. Importance of glycosidases in mammalian glycoprotein biosynthesis. *Biochim. Biophys. Acta* 1473: 96-107.
3. Hardt, B., et al. 2005. Human endo- α -1,2-mannosidase is a Golgi-resident type II membrane protein. *Biochimie* 87: 169-179.
4. Hamilton, S.R., et al. 2005. Intact α -1,2-endomannosidase is a typical type II membrane protein. *Glycobiology* 15: 615-624.
5. Yu, Y., et al. 2008. Substance dependence low-density whole genome association study in two distinct American populations. *Hum. Genet.* 123: 495-506.
6. Online Mendelian Inheritance in Man, OMIM[™]. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 612327. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. Farrer, L.A., et al. 2009. Association of variants in MANEA with cocaine-related behaviors. *Arch. Gen. Psychiatry* 66: 267-274.

CHROMOSOMAL LOCATION

Genetic locus: MANEA (human) mapping to 6q16.1; Manea (mouse) mapping to 4 A3.

SOURCE

MANEA (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MANEA 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-161106 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

MANEA (G-14) is recommended for detection of MANEA 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); non cross-reactive with MANEAL.

MANEA (G-14) is also recommended for detection of MANEA in additional species, including equine, canine and bovine.

Suitable for use as control antibody for MANEA siRNA (h): sc-95094, MANEA siRNA (m): sc-149249, MANEA shRNA Plasmid (h): sc-95094-SH, MANEA shRNA Plasmid (m): sc-149249-SH, MANEA shRNA (h) Lentiviral Particles: sc-95094-V and MANEA shRNA (m) Lentiviral Particles: sc-149249-V.

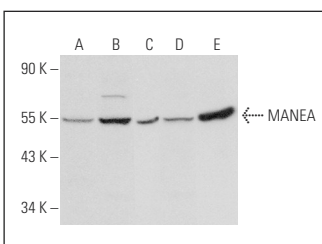
Molecular Weight of MANEA: 54 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A549 cell lysate: sc-2413 or KNRK whole cell lysate: sc-2214.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



MANEA (G-14): sc-161106. Western blot analysis of MANEA expression in c4 (A), HeLa (B), KNRK (C), A549 (D) and NIH/3T3 (E) 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.