SANTA CRUZ BIOTECHNOLOGY, INC.

MGC70857 (G-16): sc-87290

BACKGROUND

Made up of nearly 146 million bases, chromosome 8 encodes about 800 genes. Translocation of portions of chromosome 8 with amplifications of the c-Myc gene are found in some leukemias and lymphomas, and typically associated with a poor prognosis. Portions of chromosome 8 have been linked to schizophrenia and bipolar disorder. Trisomy 8, also known as Warkany syndrome 2, most often results in early miscarriage but is occasionally seen in a mosaic form in surviving patients who suffer to a varying degree from a number of symptoms including retarded mental and motor development, and certain facial and developmental defects. WRN is a DNA helicase encoded by chromosome 8 and shown defective in those with the early aging disorder Werner syndrome. Chromosome 8 is also associated with Pfeiffer syndrome, congenital hypothyroidism and Waardenburg syndrome. The C8orf82/MGC70857 gene product has been provisionally designated MGC70857 pending further characterization.

REFERENCES

1. Wildenauer, D.B. and Schwab, S.G. 1999. Chromosomes 8 and 10 workshop. Am. J. Med. Genet. 88: 239-243.
2. Kashino, G., et al. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. Biochem. Biophys. Res. Commun. 289: 111-115.
3. Selicorni, A., et al. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. Hum. Genet. 110: 64-67.
4. McQueen, M.B., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. Am. J. Hum. Genet. 77: 582-595.
5. Agrelo, R., et al. 2006. Epigenetic inactivation of the premature aging Werner syndrome gene in human cancer. Proc. Natl. Acad. Sci. USA 103: 8822-8827.
6. Mossafa, H., et al. 2006. Non-Hodgkin's lymphomas with Burkitt-like cells are associated with c-Myc amplification and poor prognosis. Leuk. Lymphoma 47: 1885-1893.
7. Nusbaum, C., et al. 2006. DNA sequence and analysis of human chromosome 8. Nature 439: 331-335.

CHROMOSOMAL LOCATION

Genetic locus: C8orf82 (human) mapping to 8q24.3; C030006K11Rik (mouse) mapping to 15 D3.

SOURCE

MGC70857 (G-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of MGC70857 of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87290 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MGC70857 (G-16) is recommended for detection of MGC70857 of human origin, C030006K11Rik of mouse origin and the corresponding rat homolog 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

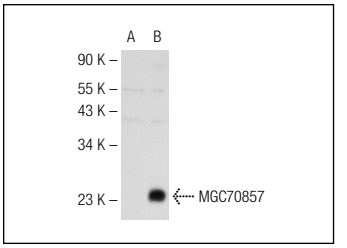
MGC70857 (G-16) is also recommended for detection of MGC70857 in additional species, including bovine and porcine.

Suitable for use as control antibody for MGC70857 siRNA (h): sc-77489, C030006K11Rik siRNA (m): sc-141800, MGC70857 shRNA Plasmid (h): sc-77489-SH, C030006K11Rik shRNA Plasmid (m): sc-141800-SH, MGC70857 shRNA (h) Lentiviral Particles: sc-77489-V and C030006K11Rik shRNA (m) Lentiviral Particles: sc-141800-V.

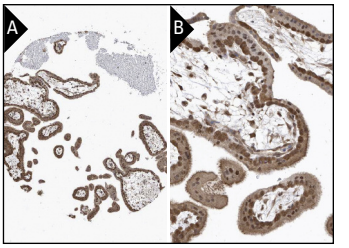
Molecular Weight of MGC70857: 24 kDa.

Positive Controls: MGC70857 (h): 293T Lysate: sc-116940 or mouse heart extract: sc-2254.

DATA



MGC70857 (G-16): sc-87290. Western blot analysis of MGC70857 expression in non-transfected: sc-117752 (**A**) and human MGC70857 transfected: sc-116940 (**B**) 293T whole cell lysates.



MGC70857 (G-16): sc-87290. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing nuclear and cytoplasmic staining of decidual and trophoblastic cells in low (**A**) and high (**B**) resolution. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

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.