

MGC70857 (G-9): sc-365833

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

- Wildenauer, D.B. and Schwab, S.G. 1999. Chromosomes 8 and 10 workshop. *Am. J. Med. Genet.* 88: 239-243.
- 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.
- Selicorni, A., et al. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. *Hum. Genet.* 110: 64-67.
- 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.
- 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.
- 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.

CHROMOSOMAL LOCATION

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

SOURCE

MGC70857 (G-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 143-171 within an internal region of MGC70857 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-365833 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

MGC70857 (G-9) is recommended for detection of MGC70857 of human origin, C030006K11Rik of mouse origin and the corresponding rat homolog by Western Blotting (starting dilution 1:100, 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 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.

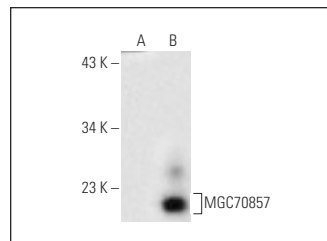
Molecular Weight of MGC70857: 24 kDa.

Positive Controls: mouse heart extract: sc-2254, KNRK whole cell lysate: sc-2214 or MGC70857 (h): 293T Lysate: sc-116940.

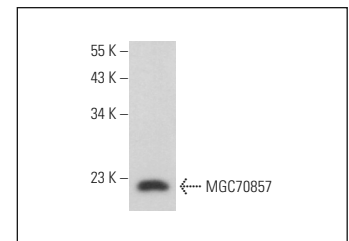
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



MGC70857 (G-9): sc-365833. 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-9): sc-365833. Western blot analysis of MGC70857 expression in KNRK whole cell lysate.

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.