

M83 (G-18): sc-240650

BACKGROUND

Chromosome 16 encodes over 900 genes in approximately 90 million base pairs, makes up nearly 3% of human cellular DNA and is associated with a variety of genetic disorders. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, though through the CREBBP gene which encodes a critical CREB binding protein. Signs of Rubinstein-Taybi include mental retardation and predisposition to tumor growth and white blood cell neoplasias. Crohn's disease is a gastrointestinal inflammatory condition associated with chromosome 16 through the NOD2 gene. An association with systemic lupus erythematosus and a number of other autoimmune disorders with the pericentromeric region of chromosome 16 has led to the identification of SLC5A11 as a potential autoimmune modifier. The M83 gene product has been provisionally designated M83 pending further characterization.

REFERENCES

1. Ben Hamida, C., et al. 1997. Homozygosity mapping of giant axonal neuropathy gene to chromosome 16q24.1. *Neurogenetics* 1: 129-133.
2. Karlsson, J., et al. 2003. Novel quantitative trait loci controlling development of experimental autoimmune encephalomyelitis and proportion of lymphocyte subpopulations. *J. Immunol.* 170: 1019-1026.
3. Forabosco, P., et al. 2006. Meta-analysis of genome-wide linkage studies of systemic lupus erythematosus. *Genes Immun.* 7: 609-614.
4. Carneiro, L.A., et al. 2007. Nod-like receptors in innate immunity and inflammatory diseases. *Ann. Med.* 39: 581-593.
5. King, K., et al. 2007. Identification, evolution, and association study of a novel promoter and first exon of the human NOD2 (CARD15) gene. *Genomics* 90: 493-501.
6. Gervasini, C., et al. 2007. High frequency of mosaic CREBBP deletions in Rubinstein-Taybi syndrome patients and mapping of somatic and germ-line breakpoints. *Genomics* 90: 567-573.
7. Koop, O., et al. 2007. Genotype-phenotype analysis in patients with giant axonal neuropathy (GAN). *Neuromuscul. Disord.* 17: 624-630.

CHROMOSOMAL LOCATION

Genetic locus: TMEM8A (human) mapping to 16p13.3; Tmem8 (mouse) mapping to 17 A3.3.

SOURCE

M83 (G-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of M83 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-240650 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

M83 (G-18) is recommended for detection of M83 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); non cross-reactive with other TMEM family members.

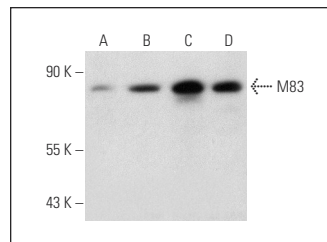
M83 (G-18) is also recommended for detection of M83 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for M83 siRNA (h): sc-93041, M83 siRNA (m): sc-149204, M83 shRNA Plasmid (h): sc-93041-SH, M83 shRNA Plasmid (m): sc-149204-SH, M83 shRNA (h) Lentiviral Particles: sc-93041-V and M83 shRNA (m) Lentiviral Particles: sc-149204-V.

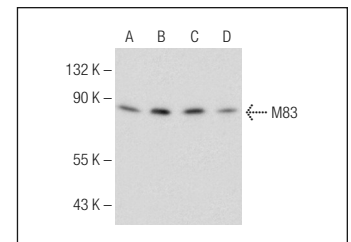
Molecular Weight of M83: 84 kDa.

Positive Controls: M83 (h): 293T Lysate: sc-175338, MIA PaCa-2 cell lysate: sc-2285 or MOLT-4 cell lysate: sc-2233.

DATA



M83 (G-18): sc-240650. Western blot analysis of M83 expression in non-transfected 293T: sc-117752 (A), human M83 transfected 293T: sc-175338 (B), AML-193 (C) and MIA PaCa-2 (D) whole cell lysates.



M83 (G-18): sc-240650. Western blot analysis of M83 expression in MOLT-4 (A), TF-1 (B), HEL 92.1.7 (C) and SUP-T1 (D) whole cell lysates.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


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Try **M83 (B-5): sc-398790**, our highly recommended monoclonal alternative to M83 (G-18).