C1orf183 (G-14): sc-163869



The Power to Question

BACKGROUND

Chromosome 1 is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1. A breakpoint has been identified in 1q which disrupts the DISC1 gene and is linked to schizophrenia. Aberrations in chromosome 1 are found in a variety of cancers including head and neck cancer, malignant melanoma and multiple myeloma. The C1orf183 gene product has been provisionally designated C1orf183 pending further characterization. There are two isoforms of C1orf183 that are produced as a result of alternative splicing events.

REFERENCES

- Watson, M.L., et al. 1990. Genomic organization of the selectin family of leukocyte adhesion molecules on human and mouse chromosome 1. J. Exp. Med. 172: 263-272.
- Blackwood, D.H., et al. 2001. Schizophrenia and affective disorders cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: clinical and P300 findings in a family. Am. J. Hum. Genet. 69: 428-433.
- 3. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. Cytogenet. Genome Res. 108: 217-222.

CHROMOSOMAL LOCATION

Genetic locus: C1orf183 (human) mapping to 1p13.2; 6530418L21Rik (mouse) mapping to 3 F2.2.

SOURCE

C1orf183 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C1orf183 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.

Blocking peptide available for competition studies, sc-163869 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.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

C1orf183 (G-14) is recommended for detection of C1orf183 of human origin, 6530418L21Rik of mouse origin and RGD1306526 of rat 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 other C1orf family members.

C1orf183 (G-14) is also recommended for detection of C1orf183 in additional species, including equine and porcine.

Suitable for use as control antibody for C1orf183 siRNA (h): sc-78849, 6530418L21Rik siRNA (m): sc-140471, C1orf183 shRNA Plasmid (h): sc-78849-SH, 6530418L21Rik shRNA Plasmid (m): sc-140471-SH, C1orf183 shRNA (h) Lentiviral Particles: sc-78849-V and 6530418L21Rik shRNA (m) Lentiviral Particles: sc-140471-V.

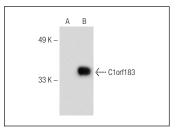
Molecular Weight of C1orf183: 33/31 kDa.

Positive Controls: C1orf183 (h): 293T Lysate: sc-114270.

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



C1orf183 (G-14): sc-163869. Western blot analysis of C1orf183 expression in non-transfected: sc-117752 (A) and human C1orf183 transfected: sc-114270 (B) 293T whole cell lysates.

PROTOCOLS

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