

# C1orf51 (S-20): sc-139576

## 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 C1orf51 gene product has been provisionally designated C1orf51 pending further characterization. There are two isoforms of C1orf51 that are produced as a result of alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: C1orf51 (human) mapping to 1q21.2.

## SOURCE

C1orf51 (S-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of C1orf51 of human origin.

## 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-139576 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

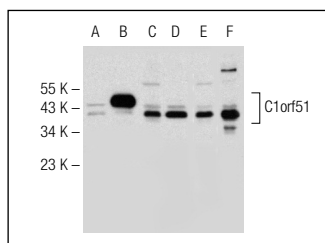
C1orf51 (S-20) is recommended for detection of C1orf51 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for C1orf51 siRNA (h): sc-88431, C1orf51 shRNA Plasmid (h): sc-88431-SH and C1orf51 shRNA (h) Lentiviral Particles: sc-88431-V.

Molecular Weight of C1orf51: 41/13 kDa.

Positive Controls: C1orf51 (h): 293T Lysate: sc-114702, HeLa whole cell lysate: sc-2200 or COLO 320DM cell lysate: sc-2226.

## DATA



C1orf51 (S-20): sc-139576. Western blot analysis of C1orf51 expression in non-transfected 293T: sc-117752 (A), human C1orf51 transfected 293T: sc-114702 (B), HeLa (C) and COLO 320DM (D) whole cell lysates and HeLa (E) and COLO 320DM (F) nuclear extracts.

## 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.