

C2orf53 (V-16): sc-245707

BACKGROUND

C2orf53 (chromosome 2 open reading frame 53), also known as MGC44505, is a 412 amino acid protein that is encoded by a gene located on human chromosome 2p23.3. The second largest human chromosome, chromosome 2 consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome is due to mutations in the ALMS1 gene. Interestingly, chromosome 2 contains what appears to be a vestigial second centromere and vestigial telomeres which gives credence to the hypothesis that human chromosome 2 is the result of an ancient fusion of two ancestral chromosomes seen in modern form today in apes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: C2orf53 (human) mapping to 2p23.3; 1700110M21Rik (mouse) mapping to 14 E2.3.

SOURCE

C2orf53 (V-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C2orf53 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 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-245707 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

C2orf53 (V-16) is recommended for detection of C2orf53 of human origin, 1700110M21Rik of mouse origin and the corresponding rat homolog by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

C2orf53 (V-16) is also recommended for detection of C2orf53 in additional species, including porcine.

Suitable for use as control antibody for C2orf53 siRNA (h): sc-94356, 1700110M21Rik siRNA (m): sc-108518, C2orf53 shRNA Plasmid (h): sc-94356-SH, 1700110M21Rik shRNA Plasmid (m): sc-108518-SH, C2orf53 shRNA (h) Lentiviral Particles: sc-94356-V and 1700110M21Rik shRNA (m) Lentiviral Particles: sc-108518-V.

Molecular Weight of C2orf53: 45 kDa.

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) 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.

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.