

C14orf37 (C-20): sc-139226

BACKGROUND

Chromosome 14 contains about 700 genes and 106 million base pairs and makes up about 3.5% of human cellular DNA. Chromosome 14 encodes the presenilin 1 (PSEN1) gene, which is one of the three key genes associated with the development of Alzheimer's disease. The SERPINA1 gene is located on chromosome 14 and when defective leads to the genetic disorder α 1-antitrypsin deficiency. This disorder is characterized by severe lung complications and liver dysfunction. Notably, the immunoglobulin heavy chain locus is found on chromosome 14 and has been identified as a fusion with the chromosome 19 encoded protein BCL3 in the (14;19) translocations found in a variety of B cell malignancies. The C14orf37 gene product has been provisionally designated C14orf37 pending further characterization.

REFERENCES

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3. Stolk, J., et al. 2006. α 1-antitrypsin deficiency: current perspective on research, diagnosis, and management. *Int. J. Chron. Obstruct. Pulmon. Dis.* 1: 151-160.
4. Vetrivel, K.S., et al. 2006. Pathological and physiological functions of presenilins. *Mol. Neurodegener.* 1: 4.
5. Albani, D., et al. 2007. Presenilin 1 mutation E318G and familial Alzheimer's disease in the Italian population. *Neurobiol. Aging* 28: 1682-1688.
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8. Martín-Subero, J.I., et al. 2007. A comprehensive genetic and histopathologic analysis identifies two subgroups of B-cell malignancies carrying a t(14;19)(q32;q13) or variant BCL3-translocation. *Leukemia* 21: 1532-1544.

CHROMOSOMAL LOCATION

Genetic locus: C14orf37 (human) mapping to 14q23.1; 3632451006Rik (mouse) mapping to 14 C1.

SOURCE

C14orf37 (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of C14orf37 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139226 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

C14orf37 (C-20) is recommended for detection of 3632451006Rik of mouse origin, C14orf37 of human origin and RGD1310110 of rat origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

C14orf37 (C-20) is also recommended for detection of C14orf37 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for C14orf37 siRNA (h): sc-92408, 3632451006Rik siRNA (m): sc-108923, C14orf37 shRNA Plasmid (h): sc-92408-SH, 3632451006Rik shRNA Plasmid (m): sc-108923-SH, C14orf37 shRNA (h) Lentiviral Particles: sc-92408-V and 3632451006Rik shRNA (m) Lentiviral Particles: sc-108923-V.

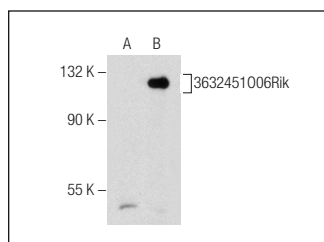
Molecular Weight of C14orf37: 84 kDa.

Positive Controls: 3632451006Rik (m): 293T Lysate: sc-117981.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



C14orf37 (C-20): sc-139226. Western blot analysis of 3632451006Rik expression in non-transfected: sc-117752 (A) and mouse 3632451006Rik transfected: sc-117981 (B) 293T 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.