# A530016L24Rik (G-14): sc-247670



The Power to Question

#### **BACKGROUND**

A530016L24Rik, also known as C14orf180 homolog, is a 165 amino acid multipass membrane protein encoded by a gene that maps to mouse chromosome 12 F1. The human homolog of A530016L24Rik is a 160 amino acid multipass membrane protein known as C14orf180 or C14orf77. The gene that encodes C14orf180 consists of approximately 10,128 bases and maps to human chromosome 14q32.33. Chromosome 14 houses over 700 genes and comprises nearly 3.5% of the human genome. Chromosome 14 encodes the presinilin 1 (PSEN1) gene, which is one of the three key genes associated with the development of Alzheimer's disease (AD). The SERPINA1 gene is also located on chromosome 14 and, when defective, leads to the genetic disorder  $\alpha 1$ -antitrypsin deficiency, which is characterized by severe lung complications and liver dysfunction.

## **REFERENCES**

- 1. Zech, L., et al. 1984. Inversion of chromosome 14 marks human T-cell chronic lymphocytic leukaemia. Nature 308: 858-860.
- Aisenberg, A.C., et al. 1985. Rearrangement of the gene for the β chain of the T-cell receptor in T-cell chronic lymphocytic leukemia and related disorders. N. Engl. J. Med. 313: 529-533.
- 3. Schellenberg, G.D., et al. 1992. Genetic linkage evidence for a familial Alzheimer's disease locus on chromosome 14. Science 258: 668-671.
- 4. Avramopoulos, D., et al. 2005. Linkage to chromosome 14q in Alzheimer's disease (AD) patients without psychotic symptoms. Am. J. Med. Genet. B Neuropsychiatr. Genet. 132B: 9-13.
- Larner, A.J. and Doran, M. 2009. Genotype-phenotype relationships of presenilin-1 mutations in Alzheimer's disease: an update. J. Alzheimers Dis. 17: 259-265.
- 6. Topic, A., et al. 2009.  $\alpha$ -1-antitrypsin phenotypes in adult liver disease patients. Ups. J. Med. Sci. 114: 228-234.

## CHROMOSOMAL LOCATION

Genetic locus: A530016L24Rik (mouse) mapping to 12 F1.

## **SOURCE**

A530016L24Rik (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of A530016L24Rik of mouse origin.

### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-247670 P, (100  $\mu$ 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.

#### **APPLICATIONS**

A530016L24Rik (G-14) is recommended for detection of A530016L24Rik of mouse 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).

Suitable for use as control antibody for A530016L24Rik siRNA (m): sc-140650, A530016L24Rik shRNA Plasmid (m): sc-140650-SH and A530016L24Rik shRNA (m) Lentiviral Particles: sc-140650-V.

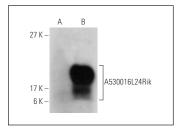
Molecular Weight of A530016L24Rik: 18 kDa.

Positive Controls: A530016L24Rik (m): 293T Lysate: sc-118129.

## **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



A530016L24Rik (G-14): sc-247670. Western blot analysis of A530016L24Rik expression in non-transfected: sc-117752 (A) and mouse A530016L24Rik transfected: sc-118129 (B) 293T whole cell lysates.

# **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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