

# FAM161B (T-12): sc-137323

## BACKGROUND

FAM161B is a 647 amino acid protein that belongs to the FAM161 family. The gene that encodes FAM161B consists of approximately 16,413 bases and maps to human chromosome 14q24.3. Housing over 700 genes, chromosome 14 comprises nearly 3.5% of the human genome. 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 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. An inversion of the long arm of chromosome 14 is thought to be involved in T-cell chronic lymphocytic leukemia (CLL), a cancer that affects T lymphocytes.

## REFERENCES

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- Schellenberg, G.D., et al. 1992. Genetic linkage evidence for a familial Alzheimer's disease locus on chromosome 14. *Science* 258: 668-671.
- 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.
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- Topic, A., et al. 2009.  $\alpha$ -1-antitrypsin phenotypes in adult liver disease patients. *Ups. J. Med. Sci.* 114: 228-234.
- Langmann, T., et al. 2010. Nonsense mutations in FAM161A cause RP28-associated recessive retinitis pigmentosa. *Am. J. Hum. Genet.* 87: 376-381.

## CHROMOSOMAL LOCATION

Genetic locus: FAM161B (human) mapping to 14q24.3; Fam161b (mouse) mapping to 12 D1.

## SOURCE

FAM161B (T-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of FAM161B of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-137323 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

FAM161B (T-12) is recommended for detection of FAM161B of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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); non cross-reactive with other C14orf family members.

FAM161B (T-12) is also recommended for detection of FAM161B in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for FAM161B siRNA (h): sc-92308, FAM161B siRNA (m): sc-140581, FAM161B shRNA Plasmid (h): sc-92308-SH, FAM161B shRNA Plasmid (m): sc-140581-SH, FAM161B shRNA (h) Lentiviral Particles: sc-92308-V and FAM161B shRNA (m) Lentiviral Particles: sc-140581-V.

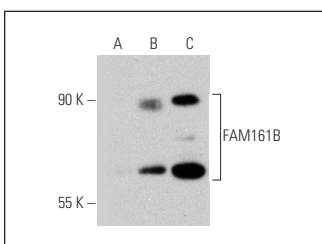
Molecular Weight of FAM161B: 74 kDa.

Positive Controls: FAM161B (h): 293T Lysate: sc-116522 or Jurkat whole cell lysate: sc-2204.

## 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



FAM161B (T-12): sc-137323. Western blot analysis of FAM161B expression in non-transfected 293T: sc-117752 (A), human FAM161B transfected 293T: sc-116522 (B) and Jurkat (C) 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.