

# RPS6KL1 (T-18): sc-248489

## BACKGROUND

RPS6KL1 (ribosomal protein S6 kinase-like 1) is a 549 amino acid protein that belongs to the Ser/Thr protein kinase family, S6 kinase subfamily and protein kinase superfamily. Existing as three alternatively spliced isoforms, RPS6KL1 contains one MIT domain and a protein kinase domain. The gene encoding RPS6KL1 maps to human chromosome 14, which houses over 700 genes and 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 (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

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6. 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.
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## CHROMOSOMAL LOCATION

Genetic locus: RPS6KL1 (human) mapping to 14q24.3; Rps6kl1 (mouse) mapping to 12 D2.

## SOURCE

RPS6KL1 (T-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of RPS6KL1 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  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-248489 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

RPS6KL1 (T-18) is recommended for detection of RPS6KL1 of mouse and human origin 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).

RPS6KL1 (T-18) is also recommended for detection of RPS6KL1 in additional species, including equine and canine.

Suitable for use as control antibody for RPS6KL1 siRNA (h): sc-92312, RPS6KL1 siRNA (m): sc-153119, RPS6KL1 shRNA Plasmid (h): sc-92312-SH, RPS6KL1 shRNA Plasmid (m): sc-153119-SH, RPS6KL1 shRNA (h) Lentiviral Particles: sc-92312-V and RPS6KL1 shRNA (m) Lentiviral Particles: sc-153119-V.

Molecular Weight of RPS6KL1 isoforms: 60/59/28 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](http://www.scbt.com) or our catalog for detailed protocols and support products.