SANTA CRUZ BIOTECHNOLOGY, INC.

RPS6KL1 (273CT4.5.3): sc-517359

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 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 α1-antitrypsin deficiency, which is characterized by severe lung complications and liver dysfunction.

REFERENCES

1. 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.
2. Larner, A.J. and Doran, M. 2006. Clinical phenotypic heterogeneity of Alzheimer's disease associated with mutations of the presenilin-1 gene. J. Neurol. 253: 139-158.
3. Girard, A., et al. 2006. A germline-specific class of small RNAs binds mammalian Piwi proteins. Nature 442: 199-202.
4. Filley, C.M., et al. 2007. The genetics of very early onset Alzheimer disease. Cogn. Behav. Neurol. 20: 149-156.
5. Chappell, S., et al. 2008. A polymorphism of the α1-antitrypsin gene represents a risk factor for liver disease. Hepatology 47: 127-132.
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.
7. Topic, A., et al. 2009. α-1-antitrypsin phenotypes in adult liver disease patients. Ups. J. Med. Sci. 114: 228-234.

CHROMOSOMAL LOCATION

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

SOURCE

RPS6KL1 (273CT4.5.3) is a mouse monoclonal antibody raised against a recombinant protein corresponding to RPS6KL1 of human origin.

PRODUCT

Each vial contains 100 µg IgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

RPS6KL1 (273CT4.5.3) is recommended for detection of RPS6KL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

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 RNF20 isoforms: 60/59/28 kDa.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.