

CEP170B (S-12): sc-138369

BACKGROUND

CEP170B (centrosomal protein 170B), also known as KIAA0284, FAM68C or CEP170R, is a 1,589 amino acid protein containing one FHA domain and expressed as 3 alternatively spliced isoforms. CEP170B is thought to potentially play a role in microtubule organization, localizing to the spindle and interacting with Kif2b. The gene encoding CEP170B is located on chromosome 14. Chromosome 14 contains about 700 genes and 106 million base pairs, comprising 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-anti-trypsin deficiency. The immunoglobulin heavy chain locus is found on chromosome 14 and has been identified as a fusion with the chromosome 19 encoded protein Bcl-3 in the (14;19) translocations found in a variety of B cell malignancies.

REFERENCES

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2. Godbolt, A.K., et al. 2004. A presenilin 1 R278I mutation presenting with language impairment. *Neurology* 63: 1702-1704.
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. Filley, C.M., et al. 2007. The genetics of very early onset Alzheimer disease. *Cogn. Behav. Neurol.* 20: 149-156.
6. 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.
7. Albani, D., et al. 2007. Presenilin-1 mutation E318G and familial Alzheimer's disease in the Italian population. *Neurobiol. Aging* 28: 1682-1688.

CHROMOSOMAL LOCATION

Genetic locus: CEP170B (human) mapping to 14q32.33; Cep170b (mouse) mapping to 12 F1.

SOURCE

CEP170B (S-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CEP170B 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-138369 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CEP170B (S-12) is recommended for detection of CEP170B of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), 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).

Suitable for use as control antibody for CEP170B siRNA (h): sc-92255, CEP170B siRNA (m): sc-141412, CEP170B shRNA Plasmid (h): sc-92255-SH, CEP170B shRNA Plasmid (m): sc-141412-SH, CEP170B shRNA (h) Lentiviral Particles: sc-92255-V and CEP170B shRNA (m) Lentiviral Particles: sc-141412-V.

Molecular Weight of CEP170B isoforms: 164/168/172 kDa.

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) 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.

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.

PROTOCOLS

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