

## AP5S1 (S-15): sc-85404

### BACKGROUND

AP5S1 (AP-5 complex subunit  $\alpha$ -1), also known as C20orf29, is a 200 amino acid protein. AP5S1 is thought to be part of the adaptor protein complex 5 (AP-5), which is a tetramer formed by AP5B1, AP5M1, AP5S1 and AP5Z1. Adaptor protein complexes sort cargo into vesicles for transport from one membrane compartment of the cell to another, with AP-5 being involved in endosomal sorting. The AP5S1 gene is located on chromosome 20p13. Representing about 2% of human DNA, chromosome 20 consists of approximately 63 million bases and 600 genes. Chromosome 20 contains a region with numerous genes expressed in the epididymis, which are thought important for seminal production, and some viewed as potential targets for male contraception. The PRNP gene encoding the prion protein associated with spongiform encephalopathies, like Creutzfeldt-Jakob disease, is found on chromosome 20. Amyotrophic lateral sclerosis, spinal muscular atrophy, ring chromosome 20 epilepsy syndrome and Alagille syndrome are also associated with chromosome 20.

### REFERENCES

1. Prusiner, S.B. 1998. The prion diseases. *Brain Pathol.* 8: 499-513.
2. Collins, S., et al. 2001. Gerstmann-Sträussler-Scheinker syndrome, fatal familial insomnia and kuru: a review of these less common human transmissible spongiform encephalopathies. *J. Clin. Neurosci.* 8: 387-397.
3. Masullo, C. and Macchi, G. 2001. Does PRNP gene control the clinical and pathological phenotype of human spongiform transmissible encephalopathies? *Clin. Neuropathol.* 20: 19-25.
4. Joó, J.G., et al. 2006. Trisomy 20 mosaicism and nonmosaic trisomy 20: a report of 2 cases. *J. Reprod. Med.* 51: 209-212.
5. Ville, D., et al. 2006. Early pattern of epilepsy in the ring chromosome 20 syndrome. *Epilepsia* 47: 543-549.
6. Elghezel, H., et al. 2007. Ring chromosome 20 syndrome without deletions of the subtelomeric and CHRNA4-KCNQ2 genes loci. *Eur. J. Med. Genet.* 50: 441-445.
7. Kazantsev, A.G. 2007. Cellular pathways leading to neuronal dysfunction and degeneration. *Drug News Perspect.* 20: 501-509.
8. Lundwall, A. 2007. A locus on chromosome 20 encompassing genes that are highly expressed in the epididymis. *Asian J. Androl.* 9: 540-544.

### CHROMOSOMAL LOCATION

Genetic locus: AP5S1 (human) mapping to 20p13; Ap5s1 (mouse) mapping to 2 F1.

### SOURCE

AP5S1 (S-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of AP5S1 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 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-85404 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

AP5S1 (S-15) is recommended for detection of AP5S1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

AP5S1 (S-15) is also recommended for detection of AP5S1 in additional species, including canine.

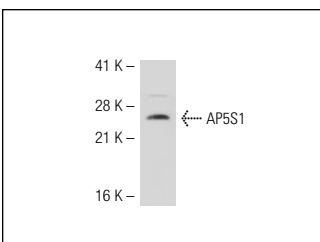
Suitable for use as control antibody for AP5S1 siRNA (h): sc-72730, AP5S1 siRNA (m): sc-141868, AP5S1 shRNA Plasmid (h): sc-72730-SH, AP5S1 shRNA Plasmid (m): sc-141868-SH, AP5S1 shRNA (h) Lentiviral Particles: sc-72730-V and AP5S1 shRNA (m) Lentiviral Particles: sc-141868-V.

Positive Controls: I-11.15 whole cell lysate.

### 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



AP5S1 (S-15): sc-85404. Western blot analysis of AP5S1 expression in I-11.15 whole cell lysate.

### RESEARCH USE

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