

AP5S1 (E-4): sc-514823

BACKGROUND

AP5S1 (AP-5 complex subunit α -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.

CHROMOSOMAL LOCATION

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

SOURCE

AP5S1 (E-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 32-53 within an internal region of AP5S1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

AP5S1 (E-4) is available conjugated to agarose (sc-514823 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514823 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514823 PE), fluorescein (sc-514823 FITC), Alexa Fluor® 488 (sc-514823 AF488), Alexa Fluor® 546 (sc-514823 AF546), Alexa Fluor® 594 (sc-514823 AF594) or Alexa Fluor® 647 (sc-514823 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514823 AF680) or Alexa Fluor® 790 (sc-514823 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514823 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

AP5S1 (E-4) is recommended for detection of AP5S1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

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.

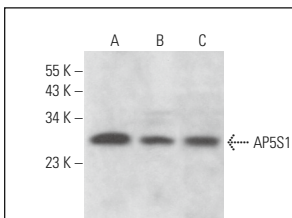
Molecular Weight of AP5S1: 23 kDa.

Positive Controls: HEK293T whole cell lysate: sc-45137, Hs 181 Tes whole cell lysate: sc-364779 or Caki-1 cell lysate: sc-2224.

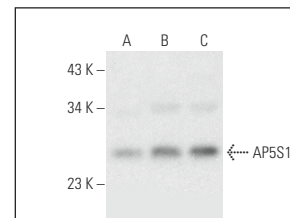
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



AP5S1 (E-4): sc-514823. Western blot analysis of AP5S1 expression in Caki-1 (A), SK-BR-3 (B) and L6 (C) whole cell lysates.



AP5S1 (E-4): sc-514823. Western blot analysis of AP5S1 expression in HEK293T (A), Hs 181 Tes (B) and Caki-1 (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.

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.