SANTA CRUZ BIOTECHNOLOGY, INC.

SPATC1L (C-4): sc-390764

BACKGROUND

The smallest of the human chromosomes, 21 makes up about 1.5% of the human genome. Chromosome 21 contains nearly 300 genes and 47 million base pairs. Down syndrome, also known as trisomy 21, is the disease most commonly associated with chromosome 21. Alzheimer's disease, Jervell and Lange-Nielsen syndrome and amyotrophic lateral sclerosis are also associated with chromosome 21. Translocations are found to occur between chromosome 21 and 8, and chromosome 21 and 12, in certain leukemias.

REFERENCES

1. Tesson, F., et al. 1996. Exclusion of KCNE1 (IsK) as a candidate gene for Jervell and Lange-Nielsen syndrome. J. Mol. Cell. Cardiol. 28: 2051-2055.
2. Tyson, J., et al. 1997. IsK and KvLQT1: mutation in either of the two subunits of the slow component of the delayed rectifier potassium channel can cause Jervell and Lange-Nielsen syndrome. Hum. Mol. Genet. 6: 2179-2185.
3. Müller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. Proc. Natl. Acad. Sci. USA 97: 206-211.
4. Mao, R., et al. 2005. Primary and secondary transcriptional effects in the developing human Down syndrome brain and heart. Genome Biol. 6: R107.
5. Robakis, N.K. 2006. The discovery and mapping to chromosome 21 of the Alzheimer's amyloid gene: history revised. J. Alzheimers Dis. 10: 453-455.
6. Sun, X., et al. 2006. BACE2, as a novel APP θ-secretase, is not responsible for the pathogenesis of Alzheimer's disease in Down syndrome. FASEB J. 20: 1369-1376.

CHROMOSOMAL LOCATION

Genetic locus: SPATC1L (human) mapping to 21q22.3; Spatc1l (mouse) mapping to 10 C1.

SOURCE

SPATC1L (C-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 161-195 of SPATC1L of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SPATC1L (C-4) is available conjugated to agarose (sc-390764 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-390764 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390764 PE), fluorescein (sc-390764 FITC), Alexa Fluor® 488 (sc-390764 AF488), Alexa Fluor® 546 (sc-390764 AF546), Alexa Fluor® 594 (sc-390764 AF594) or Alexa Fluor® 647 (sc-390764 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390764 AF680) or Alexa Fluor® 790 (sc-390764 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390764 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

SPATC1L (C-4) is recommended for detection of SPATC1L of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 SPATC1L siRNA (h): sc-91465, SPATC1L siRNA (m): sc-108400, SPATC1L shRNA Plasmid (h): sc-91465-SH, SPATC1L shRNA Plasmid (m): sc-108400-SH, SPATC1L shRNA (h) Lentiviral Particles: sc-91465-V and SPATC1L shRNA (m) Lentiviral Particles: sc-108400-V.

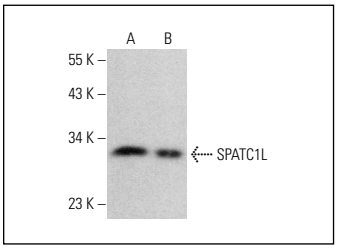
Molecular Weight of SPATC1L: 38 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206 or MDA-MB-231 cell lysate: sc-2232.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



SPATC1L (C-4): sc-390764. Western blot analysis of SPATC1L expression in MCF7 (**A**) and MDA-MB-231 (**B**) 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.