SANTA CRUZ BIOTECHNOLOGY, INC.

SPTLC3 (D-13): sc-139431



BACKGROUND

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 that 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. The SPTLC3 gene product has been provisionally designated SPTLC3 pending further characterization.

REFERENCES

- 1. Prusiner, S.B. 1998. The prion diseases. Brain Pathol. 8: 499-513.
- Collins, S., McLean, C.A. and Masters, C.L. 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.
- 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.
- Joó, J.G., Beke, A., Tóth-Pál, E., Hargitai, B., Szigeti, Z., Papp, C. and Papp, Z. 2006. Trisomy 20 mosaicism and nonmosaic trisomy 20: a report of 2 cases. J. Reprod. Med. 51: 209-212.
- Ville, D., Kaminska, A., Bahi-Buisson, N., Biraben, A., Plouin, P., Telvi, L., Dulac, O. and Chiron, C. 2006. Early pattern of epilepsy in the ring chromosome 20 syndrome. Epilepsia 47: 543-549.
- Elghezal, H., Hannachi, H., Mougou, S., Kammoun, H., Triki, C. and Saad, A. 2007. Ring chromosome 20 syndrome without deletions of the subtelomeric and CHRNA4-KCN02 genes loci. Eur. J. Med. Genet. 50: 441-445.
- 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.
- 9. O'Rand, M.G., Widgren, E.E., Wang, Z. and Richardson, R.T. 2007. Eppin: an epididymal protease inhibitor and a target for male contraception. Soc. Reprod. Fertil. Suppl. 63: 445-453.

CHROMOSOMAL LOCATION

Genetic locus: Sptlc3 (mouse) mapping to 2 F3.

SOURCE

SPTLC3 (D-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of SPTLC3 of mouse 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 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139431 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SPTLC3 (D-13) is recommended for detection of SPTLC3 of mouse and rat 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); non cross-reactive with SPTLC1 or SPTLC2.

Suitable for use as control antibody for SPTLC3 siRNA (m): sc-153805, SPTLC3 shRNA Plasmid (m): sc-153805-SH and SPTLC3 shRNA (m) Lentiviral Particles: sc-153805-V.

Molecular Weight of SPTLC3: 63 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) Immunofluo-rescence: 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.

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.