SANTA CRUZ BIOTECHNOLOGY, INC.

C21orf59 (Y-18): sc-83559

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TThe 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. C21orf59, also known as C21orf48, is a 290 amino acid protein and its gene product has been provisionally designated C21orf59 pending further characterization.

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.
7. Aït Yahya-Graison, E., et al. 2007. Classification of human chromosome 21 gene-expression variations in Down syndrome: impact on disease phenotypes. Am. J. Hum. Genet. 81: 475-491.

CHROMOSOMAL LOCATION

Genetic locus: C21orf59 (human) mapping to 21q22.1; 1110004E09Rik (mouse) mapping to 16 C3.3.

SOURCE

C21orf59 (Y-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of C21orf59 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83559 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

C21orf59 (Y-18) is recommended for detection of C21orf59 of human origin, 1110004E09Rik of mouse origin and the corresponding rat homolog of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

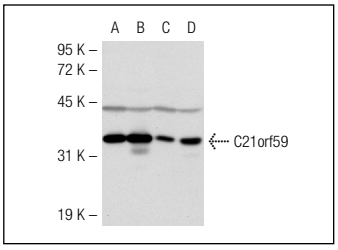
C21orf59 (Y-18) is also recommended for detection of C21orf59 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for C21orf59 siRNA (h): sc-91375, 1110004E09Rik siRNA (m): sc-108141, C21orf59 shRNA Plasmid (h): sc-91375-SH, 1110004E09Rik shRNA Plasmid (m): sc-108141-SH, C21orf59 shRNA (h) Lentiviral Particles: sc-91375-V and 1110004E09Rik shRNA (m) Lentiviral Particles: sc-108141-V.

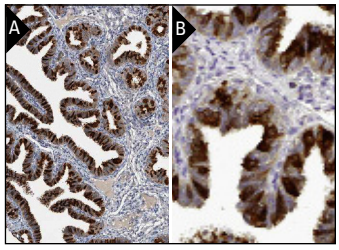
Molecular Weight of C21orf59: 33 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or PC-3 cell lysate: sc-2220.

DATA



C21orf59 (Y-18): sc-83559. Western blot analysis of C21orf59 expression in HeLa (**A**), K-562 (**B**), PC-3 (**C**) and LNCaP (**D**) whole cell lysates.



C21orf59 (Y-18): sc-83559. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube showing cytoplasmic staining of glandular cells at low (**A**) and high (**B**) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

MONOS Satisfaction Guaranteed

Try **C21orf59 (B-1): sc-365792** or **C21orf59 (C-2): sc-365455**, our highly recommended monoclonal alternatives to C21orf59 (Y-18).