SANTA CRUZ BIOTECHNOLOGY, INC.

C21orf2 (S-20): sc-83232

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. The C21orf2 gene product has been provisionally designated C21orf2 pending further characterization.

REFERENCES

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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.
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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.
8. Peterson, L.F., et al. 2007. Acute myeloid leukemia with the 8q22;21q22 translocation: secondary mutational events and alternative t(8;21) transcripts. Blood 110: 799-805.
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CHROMOSOMAL LOCATION

Genetic locus: C21orf2 (human) mapping to 21q22.3; 1810043G02Rik (mouse) mapping to 10 C1.

SOURCE

C21orf2 (S-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of C21orf2 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 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83232 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

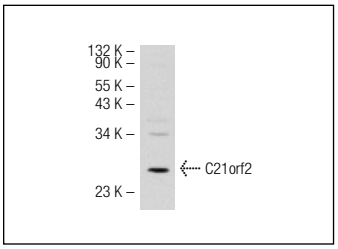
C21orf2 (S-20) is recommended for detection of C21orf2 of human origin, 1810043G02Rik of mouse origin and the corresponding rat homolog of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (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).

Suitable for use as control antibody for C21orf2 siRNA (h): sc-91492, 1810043G02Rik siRNA (m): sc-108571, C21orf2 shRNA Plasmid (h): sc-91492-SH, 1810043G02Rik shRNA Plasmid (m): sc-108571-SH, C21orf2 shRNA (h) Lentiviral Particles: sc-91492-V and 1810043G02Rik shRNA (m) Lentiviral Particles: sc-108571-V.

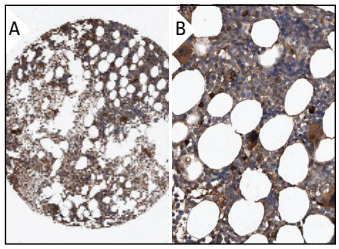
Molecular Weight of C21orf2: 28/24 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

DATA



C21orf2 (S-20): sc-83232. Western blot analysis of C21orf2 expression in Jurkat whole cell lysate.



C21orf2 (S-20): sc-83232. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bone marrow tissue showing cytoplasmic staining of bone marrow poietic cells in low (**A**) and high (**B**) resolution. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

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.