SANTA CRUZ BIOTECHNOLOGY, INC.

KIAA1671 (A-20): sc-86157



BACKGROUND

KIAA1671 is a 1,806 amino acid protein that exists as 2 alternatively spliced isoforms. The gene that encodes KIAA1671 consists of approximately 171,816 bases and maps to human chromosome 22q11.23. Chromosome 22 houses over 500 genes and is the second smallest chromosome in the human genome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, Neurofibromatosis type 2, autism and schizophrenia. Additionally, translocations between chromosomes 9 and 22 may lead to the formation of the Philadelphia Chromosome and the subsequent production of the novel fusion protein Bcr-Abl, a potent cell proliferation activator found in several types of leukemias.

REFERENCES

- 1. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 606232. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Briegel, W. and Cohen, M. 2004. Chromosome 22q11 deletion syndrome and its relevance for child and adolescent psychiatry. An overview of etiology, physical symptoms, aspects of child development and psychiatric disorders. Z. Kinder Jugendpsychiatr. Psychother. 32: 107-115.
- Gothelf, D., Schaer, M. and Eliez, S. 2008. Genes, brain development and psychiatric phenotypes in velo-cardio-facial syndrome. Dev. Disabil. Res. Rev. 14: 59-68.
- Sathyamoorthi, S., Morales, J., Bermudez, J., McBride, L., Luquette, M., McGoey, R., Oates, N., Hales, S., Biegel, J.A. and Lacassie, Y. 2009. Array analysis and molecular studies of INI1 in an infant with deletion 22q13 (Phelan-McDermid syndrome) and atypical teratoid/rhabdoid tumor. Am. J. Med. Genet. A 149A: 1067-1069.
- Vorstman, J.A., Chow, E.W., Ophoff, R.A., van Engeland, H., Beemer, F.A., Kahn, R.S., Sinke, R.J. and Bassett, A.S. 2009. Association of the PIK4CA schizophrenia-susceptibility gene in adults with the 22q11.2 deletion syndrome. Am. J. Med. Genet. B Neuropsychiatr. Genet. 150B: 430-433.
- Evans, D.G. 2009. Neurofibromatosis 2 Bilateral acoustic neurofibromatosis, central neurofibromatosis, NF2, neurofibromatosis type II. Genet. Med. 11: 599-610.
- 7. Rumpold, H. and Webersinke, G. 2011. Molecular pathogenesis of Philadelphia-positive chronic myeloid leukemia-is it all Bcr-Abl? Curr. Cancer Drug Targets 11: 3-19.

CHROMOSOMAL LOCATION

Genetic locus: KIAA1671 (human) mapping to 22q11.23.

SOURCE

KIAA1671 (A-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of KIAA1671 of human origin.

STORAGE

Store at 4° C, **D0 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, ready P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KIAA1671 (A-20) is recommended for detection of KIAA1671 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other KIAA family members.

KIAA1671 (A-20) is also recommended for detection of KIAA1671 in additional species, including equine.

Suitable for use as control antibody for KIAA1671 siRNA (h): sc-75387, KIAA1671 shRNA Plasmid (h): sc-75387-SH and KIAA1671 shRNA (h) Lentiviral Particles: sc-75387-V.

Molecular Weight of KIAA1671 isoforms: 197/35 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.