## BACKGROUND

Chromosome 22 contains over 500 genes and about 49 million bases. Being the second smallest human chromosome, 22 contains a surprising variety of interesting genes. Phelan-McDermid syndrome, neurofibromatosis type 2 and autism are associated with chromosome 22. A schizophrenia susceptibility locus has been identified on chromosome 22 and studies show that $22 q 11$ deletion symptoms include a high incidence of schizophrenia. Translocations between chromosomes 9 and 22 may lead to the formation of the Philadelphia chromosome and the subsequent production of the novel fusion protein, BCRAbl, a potent cell proliferation activator found in several types of leukemia. The LOC339674 gene product has been provisionally designated LOC339674 pending further characterization.

## REFERENCES

1. Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. Chromosome 22. Genet. Test. 2: 89-97.
2. Schwab, S.G., et al. 1999. Chromosome 22 workshop report. Am. J. Med. Genet. 88: 276-278.
3. Tsilchorozidou, T., et al. 2004. Constitutional rearrangements of chromosome 22 as a cause of neurofibromatosis 2. J. Med. Genet. 41: 529-534.
4. Arinami, T. 2006. Analyses of the associations between the genes of 22 q 11 deletion syndrome and schizophrenia. J. Hum. Genet. 51: 1037-1045.
5. Paylor, R., et al. 2006. Tbx1 haploinsufficiency is linked to behavioral disorders in mice and humans: implications for $22 q 11$ deletion syndrome. Proc. Natl. Acad. Sci. USA 103: 7729-7734.
6. Zheng, $X$., et al. 2006. BCR and its mutants, the reciprocal $t(9 ; 22)$-associated ABL/BCR fusion proteins, differentially regulate the cytoskeleton and cell motility. BMC Cancer 6: 262.
7. Ahronowitz, I., et al. 2007. Mutational spectrum of the NF2 gene: a metaanalysis of 12 years of research and diagnostic laboratory findings. Hum. Mutat. 28: 1-12.
8. Hay, B.N. 2007. Deletion 22q11: spectrum of associated disorders. Semin. Pediatr. Neurol. 14: 136-139.

## CHROMOSOMAL LOCATION

Genetic locus: BK250D10.8 (human) mapping to 22q13.2.

## SOURCE

LOC339674 (C-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of LOC339674 of human origin.

## PRODUCT

Each vial contains $100 \mu \mathrm{glg}$ in 1.0 ml of PBS with < $0.1 \%$ sodium azide and $0.1 \%$ gelatin.
Blocking peptide available for competition studies, sc-86540 P, ( $100 \mu \mathrm{~g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \%$ BSA).

## APPLICATIONS

LOC339674 (C-17) is recommended for detection of LOC339674 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).
Suitable for use as control antibody for LOC339674 siRNA (h): sc-75459, LOC339674 shRNA Plasmid (h): sc-75459-SH and LOC339674 shRNA (h) Lentiviral Particles: sc-75459-V.
Molecular Weight of LOC339674: 9 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 MarkerTM compatible goat antirabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz MarkerTM Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:1001:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz ${ }^{\text {™ }}$ Mounting Medium: sc-24941.

## STORAGE

Store at $4^{\circ} \mathrm{C},{ }^{* *}$ 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.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

