FAM109B (N-17): sc-86440



The Power to Question

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 22q13.2 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, Bcr-Abl, a potent cell proliferation activator found in several types of leukemia. The FAM109B gene product has been provisionally designated FAM109B 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.
- Schwab, S.G. and Wildenauer, D.B. 1999. Chromosome 22 workshop report. Am. J. Med. Genet. 88: 276-278.
- Tsilchorozidou, T., Menko, F.H., Lalloo, F., Kidd, A., De Silva, R., Thomas, H., Smith, P., Malcolmson, A., Dore, J., Madan, K., Brown, A., Yovos, J.G., Tsaligopoulos, M., Vogiatzis, N., Baser, M.E., Wallace, A.J. and Evans, D.G. 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 22q11 deletion syndrome and schizophrenia. J. Hum. Genet. 51: 1037-1045.
- Paylor, R., Glaser, B., Mupo, A., Ataliotis, P., Spencer, C., Sobotka, A., Sparks, C., Choi, C.H., Oghalai, J., Curran, S., Murphy, K.C., Monks, S., Williams, N., O'Donovan, M.C., Owen, M.J., Scambler, P.J. and Lindsay, E. 2006. TBX1 haploinsufficiency is linked to behavioral disorders in mice and humans: implications for 22q11 deletion syndrome. Proc. Natl. Acad. Sci. USA 103: 7729-7734.
- 6. Zheng, X., Güller, S., Beissert, T., Puccetti, E. and Ruthardt, M. 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.

CHROMOSOMAL LOCATION

Genetic locus: FAM109B (human) mapping to 22q13.2; Fam109b (mouse) mapping to 15 E1.

SOURCE

FAM109B (N-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of FAM109B of human origin.

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-86440 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FAM109B (N-17) is recommended for detection of FAM109B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

FAM109B (N-17) is also recommended for detection of FAM109B in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for FAM109B siRNA (h): sc-77296, FAM109B siRNA (m): sc-141943, FAM109B shRNA Plasmid (h): sc-77296-SH, FAM109B shRNA Plasmid (m): sc-141943-SH, FAM109B shRNA (h) Lentiviral Particles: sc-77296-V and FAM109B shRNA (m) Lentiviral Particles: sc-141943-V.

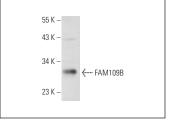
Molecular Weight of FAM109B: 28 kDa.

Positive Controls: Mouse heart extract: sc-2254, HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: 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.

DATA



FAM109B (N-17): sc-86440. Western blot analysis of FAM109B expression in mouse heart tissue extract.

STORAGE

Store at 4° 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**