FAM83F (K-18): sc-102516



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 22q11 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-AbI, a potent cell proliferation activator found in several types of leukemia. The FAM83F gene product has been provisionally designated FAM83F 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., 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.
- Arinami, T. 2006. Analyses of the associations between the genes of 22q11 deletion syndrome and schizophrenia. J. Hum. Genet. 51: 1037-1045.
- Paylor, R., et al. 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.
- 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.
- 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.
- Hay, B.N. 2007. Deletion 22q11: spectrum of associated disorders. Semin. Pediatr. Neurol. 14: 136-139.

CHROMOSOMAL LOCATION

Genetic locus: FAM83F (human) mapping to 22q13.1.

SOURCE

FAM83F (K-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of FAM83F 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.

PROTOCOLS

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

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-102516 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FAM83F (K-18) is recommended for detection of FAM83F of 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).

Suitable for use as control antibody for FAM83F siRNA (h): sc-77312, FAM83F shRNA Plasmid (h): sc-77312-SH and FAM83F shRNA (h) Lentiviral Particles: sc-77312-V.

Molecular Weight of FAM83F isoform 1: 55 kDa.

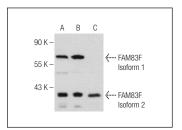
Molecular Weight of FAM83F isoform 2: 37 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285, LNCaP cell lysate: sc-2231 or JAR cell lysate: sc-2276.

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



FAM83F (K-18): sc-102516. Western blot analysis of FAM83F expression in MIA PaCa-2 (**A**), LNCaP (**B**) and JAR (**C**) whole cell lysates.

RESEARCH USE

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