

FAM194B (F-3): sc-515452

BACKGROUND

FAM194B is a 696 amino acid protein that belongs to the FAM194 family and is alternatively spliced created 2 isoforms. The gene encoding FAM194B maps to human chromosome 13, which comprises nearly 4% of human DNA and contains about 114 million base pairs and 400 genes. Key tumor suppressor genes on chromosome 13 include the breast cancer susceptibility gene, BRCA2, and the RB1 (retinoblastoma) gene. RB1 encodes a crucial tumor suppressor protein which, when defective, leads to malignant growth in the retina and has been implicated in a variety of other cancers. The gene SLITRK1, which is associated with Tourette syndrome, is on chromosome 13. As with most chromosomes, polysomy of part or all of chromosome 13 is deleterious to development and decreases the odds of survival.

REFERENCES

1. Deng, H., Le, W.D., Xie, W.J. and Jankovic, J. 2006. Examination of the SLITRK1 gene in Caucasian patients with Tourette syndrome. *Acta Neurol. Scand.* 114: 400-402.
2. Hsu, H.F. and Hou, J.W. 2007. Variable expressivity in Patau syndrome is not all related to trisomy 13 mosaicism. *Am. J. Med. Genet. A* 143A: 1739-1748.
3. Hall, H.E., Chan, E.R., Collins, A., Judis, L., Shirley, S., Surti, U., Hoffner, L., Cockwell, A.E., Jacobs, P.A. and Hassold, T.J. 2007. The origin of trisomy 13. *Am. J. Med. Genet. A* 143A: 2242-2248.
4. Thorslund, T. and West, S.C. 2007. BRCA2: a universal recombinase regulator. *Oncogene* 26: 7720-7730.

CHROMOSOMAL LOCATION

Genetic locus: ERICH6B (human) mapping to 13q14.13.

SOURCE

FAM194B (F-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-18 at the N-terminus of FAM194B of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FAM194B (F-3) is available conjugated to agarose (sc-515452 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515452 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515452 PE), fluorescein (sc-515452 FITC), Alexa Fluor® 488 (sc-515452 AF488), Alexa Fluor® 546 (sc-515452 AF546), Alexa Fluor® 594 (sc-515452 AF594) or Alexa Fluor® 647 (sc-515452 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515452 AF680) or Alexa Fluor® 790 (sc-515452 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515452 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

FAM194B (F-3) is recommended for detection of FAM194B of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FAM194B siRNA (h): sc-75029, FAM194B shRNA Plasmid (h): sc-75029-SH and FAM194B shRNA (h) Lentiviral Particles: sc-75029-V.

Molecular Weight of FAM194B isoforms: 81/82 kDa.

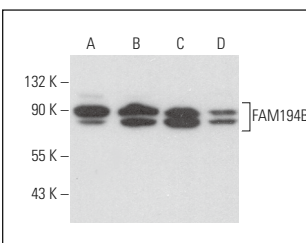
Positive Controls: HL-60 whole cell lysate: sc-2209, NIH/3T3 whole cell lysate: sc-2210 or F9 cell lysate: sc-2245.

RECOMMENDED SUPPORT REAGENTS

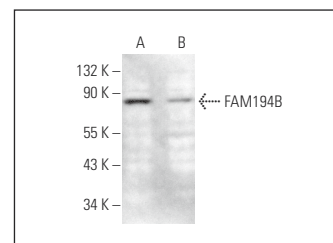
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



FAM194B (F-3): sc-515452. Western blot analysis of FAM194B expression in HL-60 (A), F9 (B), NIH/3T3 (C) and PC-12 (D) whole cell lysates.



FAM194B (F-3): sc-515452. Western blot analysis of FAM194B expression in RT-4 (A) and U-251-MG (B) whole cell lysates.

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.

PROTOCOLS

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