

FAM58A/B (N-16): sc-84436

BACKGROUND

FAM58A (family with sequence similarity 58, member A) and FAM58B (family with sequence similarity 58, member B) are 248 amino acid and 252 amino acid proteins, respectively, that belong to the cyclin-like FAM58 subfamily. Existing as multiple alternatively spliced isoforms, FAM58A interacts with Sall1 and is thought to play a role in cellular proliferation. Defects in the gene encoding FAM58A are associated with toe syndactyly, telecanthus, and anogenital and renal malformations (STAR syndrome), which is characterized by renal and anogenital malformations. FAM58B, a protein that is related to FAM58A, is expressed in healthy retina and breast tissue, as well as in retinoblastoma and breast cancer cell lines, suggesting a role for FAM58B in tumor transformation and metastasis.

REFERENCES

1. Dunham, A., et al. 2004. The DNA sequence and analysis of human chromosome 13. *Nature* 428: 522-528.
2. Deng, H., et al. 2006. Examination of the SLITRK1 gene in Caucasian patients with Tourette's syndrome. *Acta Neurol. Scand.* 114: 400-402.
3. Giacinti, C., et al. 2006. RB and cell cycle progression. *Oncogene* 25: 5220-5227.
4. Grados, M.A., et al. 2006. A new gene for Tourette's syndrome: a window into causal mechanisms? *Trends Genet.* 22: 291-293.
5. Bugge, M., et al. 2007. Non-disjunction of chromosome 13. *Hum. Mol. Genet.* 16: 2004-2010.
6. Hsu, H.F., et al. 2007. Variable expressivity in Patau syndrome is not all related to trisomy 13 mosaicism. *Am. J. Med. Genet. A* 143: 1739-1748.
7. Hall, H.E., et al. 2007. The origin of trisomy 13. *Am. J. Med. Genet. A* 143: 2242-2248.
8. Hassler, M., et al. 2007. Crystal structure of the retinoblastoma protein N domain provides insight into tumor suppression, ligand interaction and holoprotein architecture. *Mol. Cell* 28: 371-385.
9. Thorslund, T., et al. 2007. BRCA2: a universal recombinase regulator. *Oncogene* 26: 7720-7730.

CHROMOSOMAL LOCATION

Genetic locus: FAM58A (human) mapping to Xq28, FAM58BP (human) mapping to 1q32.1; Fam58b (mouse) mapping to 11 B5.

SOURCE

FAM58A/B (N-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of FAM58A of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84436 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FAM58A/B (N-16) is recommended for detection of FAM58A and FAM58B of human origin and FAM58A of mouse and rat origin by Western Blotting (starting dilution 1:200, 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).

FAM58A/B (N-16) is also recommended for detection of FAM58A and FAM58B in additional species, including canine and bovine.

Suitable for use as control antibody for FAM58A siRNA (m): sc-145048, FAM58A shRNA Plasmid (m): sc-145048-SH and FAM58A shRNA (m) Lentiviral Particles: sc-145048-V.

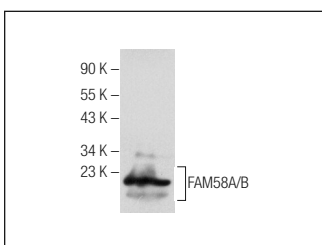
Molecular Weight of FAM58A/B: 24 kDa.

Positive Controls: mouse eye extract: sc-364241.

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



FAM58A/B (N-16): sc-84436. Western blot analysis of FAM58A/B expression in mouse eye 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.

PROTOCOLS

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