

FAM58A/B (S-12): sc-137997

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 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

- Green, A.J., et al. 1996. An autosomal dominant syndrome of renal and anogenital malformations with syndactyly. *J. Med. Genet.* 33: 594-596.
- Hartley, J.L., et al. 2000. DNA cloning using *in vitro* site-specific recombination. *Genome Res.* 10: 1788-1795.
- Corson, T.W., et al. 2005. KIF14 is a candidate oncogene in the 1q minimal region of genomic gain in multiple cancers. *Oncogene* 24: 4741-4753.
- Kim, J.M., et al. 2006. Identification of genes related to Parkinson's disease using expressed sequence tags. *DNA Res.* 13: 275-286.
- Unger, S., et al. 2008. Mutations in the cyclin family member FAM58A cause an X-linked dominant disorder characterized by syndactyly, telecanthus and anogenital and renal malformations. *Nat. Genet.* 40: 287-289.
- Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 300707. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: FAM58A (human) mapping to Xq28, FAM58B (human) mapping to 1q32.1; Fam58b (mouse) mapping to 11 B5.

SOURCE

FAM58A/B (S-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of FAM58A of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137997 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

FAM58A/B (S-12) is recommended for detection of FAM58A and FAM58B of human origin and FAM58A of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

FAM58A/B (S-12) is also recommended for detection of FAM58A and FAM58B in additional species, including canine, bovine and porcine.

Molecular Weight of FAM58A: 28 kDa.

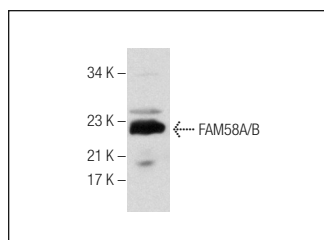
Molecular Weight of FAM58B: 29 kDa.

Positive Controls: Mouse eye tissue extract.

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 (S-12): sc-137997. Western blot analysis of FAM58A/B expression in mouse eye tissue extract.

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.