

FAM118B (L-14): sc-241416

BACKGROUND

FAM118B is a 351 amino acid protein that belongs to the FAM118 family. The gene encoding FAM118B maps to human chromosome 11, which comprises approximately 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded *Atm* gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. *Atm* mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders sickle cell anemia and thalassemia are caused by HBB gene mutations, while Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11-encoded genes.

REFERENCES

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2. Jira, P.E., et al. 2003. Smith-Lemli-Opitz syndrome and the DHCR7 gene. *Ann. Hum. Genet.* 67: 269-280.
3. Schuchman, E.H. 2007. The pathogenesis and treatment of acid sphingomyelinase-deficient Niemann-Pick disease. *J. Inherit. Metab. Dis.* 30: 654-663.
4. Siem, G., et al. 2008. Jervell and Lange-Nielsen syndrome in Norwegian children: aspects around cochlear implantation, hearing, and balance. *Ear Hear.* 29: 261-269.
5. Bhuiyan, Z.A., et al. 2008. An intronic mutation leading to incomplete skipping of exon-2 in *KCNQ1* rescues hearing in Jervell and Lange-Nielsen syndrome. *Prog. Biophys. Mol. Biol.* 98: 319-327.
6. Coldren, C.D., et al. 2009. Chromosomal microarray mapping suggests a role for *BSX* and *Neurogranin* in neurocognitive and behavioral defects in the 11q terminal deletion disorder (Jacobsen syndrome). *Neurogenetics* 10: 89-95.

CHROMOSOMAL LOCATION

Genetic locus: FAM118B (human) mapping to 11q24.2; Fam118b (mouse) mapping to 9 A4.

SOURCE

FAM118B (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FAM118B 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-241416 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FAM118B (L-14) is recommended for detection of FAM118B of human origin and Ppp4r1 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); non cross-reactive with FAM118A.

FAM118B (L-14) is also recommended for detection of FAM118B in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for FAM118B siRNA (h): sc-96272, Ppp4r1 siRNA (m): sc-141799, FAM118B shRNA Plasmid (h): sc-96272-SH, Ppp4r1 shRNA Plasmid (m): sc-141799-SH, FAM118B shRNA (h) Lentiviral Particles: sc-96272-V and Ppp4r1 shRNA (m) Lentiviral Particles: sc-141799-V.

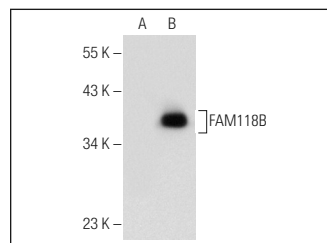
Molecular Weight of FAM118B: 39 kDa.

Positive Controls: FAM118B (h): 293T Lysate: sc-110690 or Ppp4r1 (m): 293T Lysate: sc-118894.

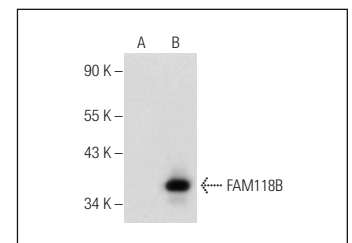
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



FAM118B (L-14): sc-241416. Western blot analysis of FAM118B expression in non-transfected: sc-117752 (A) and human FAM118B transfected: sc-110690 (B) 293T whole cell lysates.



FAM118B (L-14): sc-241416. Western blot analysis of FAM118B expression in non-transfected: sc-117752 (A) and mouse FAM118B transfected: sc-118894 (B) 293T 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.