

# FAM118B (C-11): sc-514039

## 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

1. Fabiani, J.E., et al. 2000. Hereditary angioedema. Long-term follow-up of 88 patients. Experience of the Argentine allergy and immunology institute. *Allergol. Immunopathol.* 28: 267-271.
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.

## CHROMOSOMAL LOCATION

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

## SOURCE

FAM118B (C-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 336-351 at the C-terminus of FAM118B of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FAM118B (C-11) is available conjugated to agarose (sc-514039 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514039 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514039 PE), fluorescein (sc-514039 FITC), Alexa Fluor® 488 (sc-514039 AF488), Alexa Fluor® 546 (sc-514039 AF546), Alexa Fluor® 594 (sc-514039 AF594) or Alexa Fluor® 647 (sc-514039 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514039 AF680) or Alexa Fluor® 790 (sc-514039 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514039 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

FAM118B (C-11) is recommended for detection of FAM118B 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 FAM118B siRNA (h): sc-96272, FAM118B siRNA (m): sc-141799, FAM118B shRNA Plasmid (h): sc-96272-SH, FAM118B shRNA Plasmid (m): sc-141799-SH, FAM118B shRNA (h) Lentiviral Particles: sc-96272-V and FAM118B shRNA (m) Lentiviral Particles: sc-141799-V.

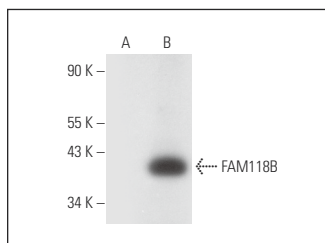
Molecular Weight of FAM118B: 39 kDa.

Positive Controls: FAM118B (h2): 293T Lysate: sc-371445.

## 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



FAM118B (C-11): sc-514039. Western blot analysis of FAM118B expression in non-transfected: sc-117752 (A) and human FAM118B transfected: sc-371445 (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.

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