## SANTA CRUZ BIOTECHNOLOGY, INC.

# FAM118A (C-13): sc-86445



#### BACKGROUND

FAM118A, also known as C22orf8, is a single-pass membrane protein that contains 357 amino acids and belongs to the FAM118 family. The gene encoding FAM118A maps to human chromosome 22, which houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, Neurofibromatosis type 2, autism and schizophrenia. Additionally, translocations between chromosomes 9 and 22 may lead to the formation of the Philadelphia Chromosome and the subsequent production of the novel fusion protein BCR-Abl, a potent cell proliferation activator found in several types of leukemias.

### REFERENCES

- 1. Collins, J.E., et al. 2004. A genome annotation-driven approach to cloning the human ORFeome. Genome Biol. 5: R84.
- Briegel, W. and Cohen, M. 2004. Chromosome 22q11 deletion syndrome and its relevance for child and adolescent psychiatry. An overview of etiology, physical symptoms, aspects of child development and psychiatric disorders. Z. Kinder Jugendpsychiatr. Psychother. 32: 107-115.
- Gothelf, D., et al. 2008. Genes, brain development and psychiatric phenotypes in velo-cardio-facial syndrome. Dev. Disabil. Res. Rev. 14: 59-68.
- Sathyamoorthi, S., et al. 2009. Array analysis and molecular studies of INI1 in an infant with deletion 22q13 (Phelan-McDermid syndrome) and atypical teratoid/rhabdoid tumor. Am. J. Med. Genet. A 149A: 1067-1069.
- Vorstman, J.A., et al. 2009. Association of the PIK4CA schizophrenia-susceptibility gene in adults with the 22q11.2 deletion syndrome. Am. J. Med. Genet. B Neuropsychiatr. Genet. 150B: 430-433.
- Evans, D.G. 2009. Neurofibromatosis 2 Bilateral acoustic neurofibromatosis, central neurofibromatosis, NF2, neurofibromatosis type II. Genet. Med. 11: 599-610.
- Rumpold, H. and Webersinke, G. 2011. Molecular pathogenesis of Philadelphia-positive chronic myeloid leukemia-is it all BCR-ABL? Curr. Cancer Drug Targets 11: 3-19.

#### CHROMOSOMAL LOCATION

Genetic locus: FAM118A (human) mapping to 22q13.31; Fam118a (mouse) mapping to 15 E2.

#### SOURCE

FAM118A (C-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of FAM118A of human origin.

### PRODUCT

Each vial contains 100  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86445 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### APPLICATIONS

FAM118A (C-13) is recommended for detection of FAM118A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 FAM118A siRNA (h): sc-77306, FAM118A siRNA (m): sc-108908, FAM118A shRNA Plasmid (h): sc-77306-SH, FAM118A shRNA Plasmid (m): sc-108908-SH, FAM118A shRNA (h) Lentiviral Particles: sc-77306-V and FAM118A shRNA (m) Lentiviral Particles: sc-108908-V.

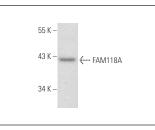
Molecular Weight of FAM118A: 40 kDa.

Positive Controls: AML-193 whole cell lysate: sc-364182 or U-937 cell lysate: sc-2239.

#### **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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



FAM118A (C-13): sc-86445. Western blot analysis of FAM118A expression in U-937 whole cell lysate.

#### **STORAGE**

Store at 4° C, \*\*D0 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.