SANTA CRUZ BIOTECHNOLOGY, INC.

FAM96B (F-1): sc-376801

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Chromosome 16 encodes over 900 genes in approximately 90 million base pairs, makes up nearly 3% of human cellular DNA and is associated with a variety of genetic disorders. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, though through the CREBBP gene which encodes a critical CREB binding protein. Signs of Rubinstein-Taybi include mental retardation and predisposition to tumor growth and white blood cell neoplasias. Crohn's disease is a gastrointestinal inflammatory condition associated with chromosome 16 through the NOD2 gene. An association with systemic lupus erythematosis and a number of other autoimmune disorders with the pericentromeric region of chromosome 16 has led to the identification of SLC5A11 as a potential autoimmune modifier. The FAM96B gene product has been provisionally designated FAM96B pending further characterization.

REFERENCES

1. Ben Hamida, C., et al. 1997. Homozygosity mapping of giant axonal neuropathy gene to chromosome 16q24.1. Neurogenetics 1: 129-133.
2. Karlsson, J., et al. 2003. Novel quantitative trait loci controlling development of experimental autoimmune encephalomyelitis and proportion of lymphocyte subpopulations. J. Immunol. 170: 1019-1026.
3. Forabosco, P., et al. 2006. Meta-analysis of genome-wide linkage studies of systemic lupus erythematosus. Genes Immun. 7: 609-614.

CHROMOSOMAL LOCATION

Genetic locus: FAM96B (human) mapping to 16q22.1; Fam96b (mouse) mapping to 8 D3.

SOURCE

FAM96B (F-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 137-163 at the C-terminus of FAM96B of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FAM96B (F-1) is available conjugated to agarose (sc-376801 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-376801 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376801 PE), fluorescein (sc-376801 FITC), Alexa Fluor® 488 (sc-376801 AF488), Alexa Fluor® 546 (sc-376801 AF546), Alexa Fluor® 594 (sc-376801 AF594) or Alexa Fluor® 647 (sc-376801 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376801 AF680) or Alexa Fluor® 790 (sc-376801 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-376801 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

FAM96B (F-1) is recommended for detection of FAM96B 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

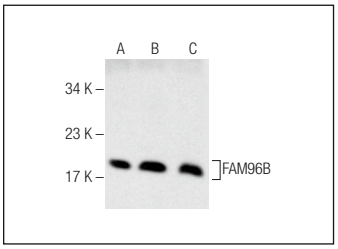
FAM96B (F-1) is also recommended for detection of FAM96B in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FAM96B siRNA (h): sc-93256, FAM96B siRNA (m): sc-108163, FAM96B shRNA Plasmid (h): sc-93256-SH, FAM96B shRNA Plasmid (m): sc-108163-SH, FAM96B shRNA (h) Lentiviral Particles: sc-93256-V and FAM96B shRNA (m) Lentiviral Particles: sc-108163-V.

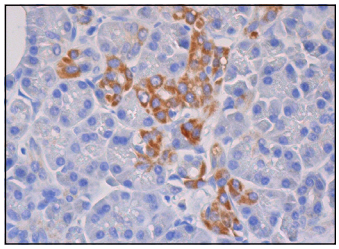
Molecular Weight of FAM96B: 18 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 or Ramos cell lysate: sc-2216.

DATA



FAM96B (F-1): sc-376801. Western blot analysis of FAM96B expression in Jurkat (**A**), K-562 (**B**) and Ramos (**C**) whole cell lysates.



FAM96B (F-1): sc-376801. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of subset of glandular cells.

SELECT PRODUCT CITATIONS

1. Palmer, C.J., et al. 2017. Cdkal1, a type 2 diabetes susceptibility gene, regulates mitochondrial function in adipose tissue. Mol. Metab. 6: 1212-1225.

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 for detailed protocols and support products.