SANTA CRUZ BIOTECHNOLOGY, INC.

FAM195A (D-5): sc-515147

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 auto-immune modifier. The FAM195A (family with sequence similarity 195, member A) gene product has been provisionally designated FAM195A 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: FAM195A (human) mapping to 16p13.3; Fam195a (mouse) mapping to 17 A3.3.

SOURCE

FAM195A (D-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 20-36 near the N-terminus of FAM195A of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FAM195A (D-5) is available conjugated to agarose (sc-515147 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515147 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515147 PE), fluorescein (sc-515147 FITC), Alexa Fluor® 488 (sc-515147 AF488), Alexa Fluor® 546 (sc-515147 AF546), Alexa Fluor® 594 (sc-515147 AF594) or Alexa Fluor® 647 (sc-515147 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515147 AF680) or Alexa Fluor® 790 (sc-515147 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515147 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

FAM195A (D-5) is recommended for detection of FAM195A 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 FAM195A siRNA (h): sc-93489, FAM195A siRNA (m): sc-140566, FAM195A shRNA Plasmid (h): sc-93489-SH, FAM195A shRNA Plasmid (m): sc-140566-SH, FAM195A shRNA (h) Lentiviral Particles: sc-93489-V and FAM195A shRNA (m) Lentiviral Particles: sc-140566-V.

Molecular Weight (predicted) of FAM195A: 18 kDa.

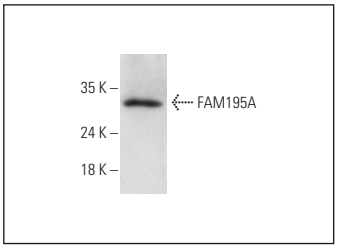
Molecular Weight (observed) of FAM195A: 28 kDa.

Positive Controls: human heart extract: sc-363763 or K-562 whole cell lysate: sc-2203.

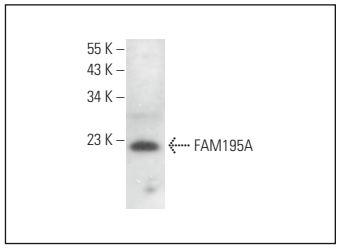
RECOMMENDED SUPPORT REAGENTS

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



FAM195A (D-5): sc-515147. Western blot analysis of FAM195A expression in human heart tissue extract.



FAM195A (D-5): sc-515147. Western blot analysis of FAM195A expression in K-562 whole cell lysate.

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.