

# FAM195A (D-5): sc-515147

## 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 erythematosus 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 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.

## 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<sub>1</sub> 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.

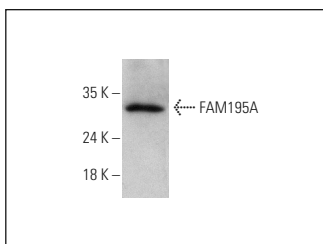
Molecular Weight (observed) of FAM195A: 28 kDa.

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

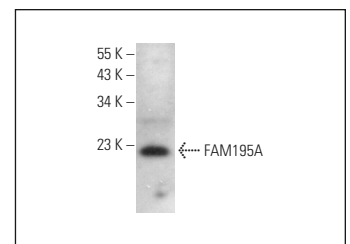
## RECOMMENDED SUPPORT REAGENTS

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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.