SANTA CRUZ BIOTECHNOLOGY, INC.

FAM184A (G-7): sc-377051

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Making up nearly 6% of the human genome, chromosome 6 contains around 1,200 genes within 170 million base pairs of sequence. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer suggesting the presence of a cancer susceptibility locus. Porphyria cutanea tarda is associated with chromosome 6 through the HFE gene which, when mutated, predisposes an individual to developing this porphyria. Notably, the PARK2 gene, which is associated with Parkinson's disease, and the genes encoding the major histocompatiblity complex proteins, which are key molecular components of the immune system and determine predisposition to rheumatic diseases, are also located on chromosome 6. Stickler syndrome, 21-hydroxylase deficiency and maple syrup urine disease are also associated with genes on chromosome 6. A bipolar disorder susceptibility locus has been identified on the q arm of chromosome 6. The FAM184A gene product has been provisionally designated FAM184A pending further characterization.

REFERENCES

1. Mungall, A.J., et al. 2003. The DNA sequence and analysis of human chromosome 6. Nature 425: 805-811.
2. Vuoristo, M.M., et al. 2004. A stop codon mutation in COL11A2 induces exon skipping and leads to non-ocular Stickler syndrome. Am. J. Med. Genet. A 130A: 160-164.

CHROMOSOMAL LOCATION

Genetic locus: FAM184A (human) mapping to 6q22.31; Fam184a (mouse) mapping to 10 B3.

SOURCE

FAM184A (G-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1063-1099 near the C-terminus of FAM184A 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.

FAM184A (G-7) is available conjugated to agarose (sc-377051 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-377051 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377051 PE), fluorescein (sc-377051 FITC), Alexa Fluor® 488 (sc-377051 AF488), Alexa Fluor® 546 (sc-377051 AF546), Alexa Fluor® 594 (sc-377051 AF594) or Alexa Fluor® 647 (sc-377051 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377051 AF680) or Alexa Fluor® 790 (sc-377051 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-377051 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

FAM184A (G-7) is recommended for detection of FAM184A 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).

FAM184A (G-7) is also recommended for detection of FAM184A in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for FAM184A siRNA (h): sc-95169, FAM184A siRNA (m): sc-140209, FAM184A shRNA Plasmid (h): sc-95169-SH, FAM184A shRNA Plasmid (m): sc-140209-SH, FAM184A shRNA (h) Lentiviral Particles: sc-95169-V and FAM184A shRNA (m) Lentiviral Particles: sc-140209-V.

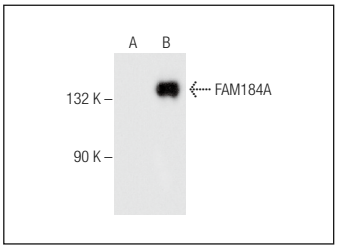
Molecular Weight of FAM184A: 133 kDa.

Positive Controls: FAM184A (h): 293T Lysate: sc-176994 or mouse heart extract: sc-2254.

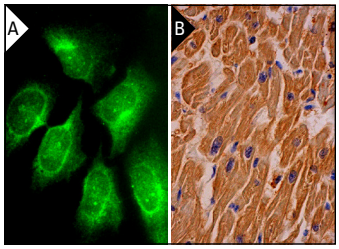
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



FAM184A (G-7): sc-377051. Western blot analysis of FAM184A expression in non-transfected: sc-117752 (**A**) and human FAM184A transfected: sc-176994 (**B**) 293T whole cell lysates.



FAM184A (G-7): sc-377051. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes (**B**).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.