FAM154A (C-6): sc-514380



The Power to Question

BACKGROUND

Chromosome 9 consists of about 145 million bases and 4% of the human genome, encoding nearly 900 genes. Considered to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, is associated with the chromosome 9 geneencoding Endoglin protein, ENG. Familial dysautonomia is also associated with chromosome 9 though through the gene IKBKAP. Notably, chromosome 9 encompasses the largest interferon family gene cluster. Chromosome 9 is partnered with chromosome 22 in the translocation leading to the aberrant production of Bcr-Abl fusion protein often found in leukemias.

REFERENCES

- 1. Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. Nature 429: 369-374.
- 2. Coppo, P., et al. 2006. Bcr-Abl activates Stat3 via JAK and MEK pathways in human cells. Br. J. Haematol. 134: 171-179.
- Zheng, X., et al. 2006. Bcr and its mutants, the reciprocal t(9;22)-associated Abl/Bcr fusion proteins, differentially regulate the cytoskeleton and cell motility. BMC Cancer 7: 262.
- Burmeister, T., et al. 2007. Atypical Bcr-Abl mRNA transcripts in adult acute lymphoblastic leukemia. Haematologica 92: 1699-1702.
- Cottin, V., et al. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (Rendu-Osler disease). Respiration 74: 361-378.
- Gardiner, J., et al. 2007. Potential role of tubulin acetylation and microtubule-based protein trafficking in familial dysautonomia. Traffic 8: 1145-1149.

CHROMOSOMAL LOCATION

Genetic locus: FAM154A (human) mapping to 9p22.1; Fam154a (mouse) mapping to 4 C4.

SOURCE

FAM154A (C-6) is a mouse monoclonal antibody raised against amino acids 164-245 mapping within an internal region of FAM154A of mouse origin.

PRODUCT

Each vial contains 200 $\mu g \ lgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FAM154A (C-6) is available conjugated to agarose (sc-514380 AC), 500 μg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514380 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514380 PE), fluorescein (sc-514380 FITC), Alexa Fluor $^{\circ}$ 488 (sc-514380 AF488), Alexa Fluor $^{\circ}$ 546 (sc-514380 AF546), Alexa Fluor $^{\circ}$ 594 (sc-514380 AF594) or Alexa Fluor $^{\circ}$ 647 (sc-514380 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor $^{\circ}$ 680 (sc-514380 AF680) or Alexa Fluor $^{\circ}$ 790 (sc-514380 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

FAM154A (C-6) is recommended for detection of FAM154A of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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 FAM154A siRNA (h): sc-92467, FAM154A siRNA (m): sc-140104, FAM154A shRNA Plasmid (h): sc-92467-SH, FAM154A shRNA Plasmid (m): sc-140104-SH, FAM154A shRNA (h) Lentiviral Particles: sc-92467-V and FAM154A shRNA (m) Lentiviral Particles: sc-140104-V.

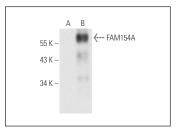
Molecular Weight of FAM154A: 55 kDa.

Positive Controls: FAM154A (h): 293T Lysate: sc-114406.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM 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-lgG κ BP-FITC: sc-516140 or m-lgG κ 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



FAM154A (C-6): sc-514380. Western blot analysis of FAM154A expression in non-transfected: sc-117752 (A) and human FAM154A transfected: sc-114406 (B) 293T whole cell lysates.

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.