SANTA CRUZ BIOTECHNOLOGY, INC.

5830415F09Rik (K-18): sc-240183



The Power to Question

BACKGROUND

5830415F09Rik (RIKEN cDNA 5830415F09 gene), also known as Nap1 (Nefassociated protein 1), AV014846 or RP23-42307.7, is a 431 amino acid protein that interacts with HIV-1 Nef, a lentivirus protein. Belonging to the UPF0066 (virR) family, 5830415F09Rik is suggested to hydrolyze acyl-CoA thioesters *in vitro*. 5830415F09Rik has a preference for substrates with medium chain length, C10-C14, but is inactive towards substrates with C18 or C20 aliphatic chains. 5830415F09Rik is the mouse homolog of human C9orf156, which is encoded by a gene located on human chromosome 9 and exists as three alternatively spliced isoforms. Human chromosome 9 houses over 900 genes and comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

REFERENCES

- Humphray, S.J., Oliver, K., Hunt, A.R., Plumb, R.W., Loveland, J.E., Howe, K.L., Andrews, T.D., Searle, S., Hunt, S.E., Scott, C.E., Jones, M.C., Ainscough, R., Almeida, J.P., Ambrose, K.D., Ashwell, R.I., Babbage, A.K., Babbage, S., Bagguley, C.L., Bailey, J., Banerjee, R., et al. 2004. DNA sequence and analysis of human chromosome 9. Nature 429: 369-374.
- Coppo, P., Flamant, S., De Mas, V., Jarrier, P., Guillier, M., Bonnet, M.L., Lacout, C., Guilhot, F., Vainchenker, W. and Turhan, A.G. 2006. BCR-ABL activates Stat3 via JAK and MEK pathways in human cells. Br. J. Haematol. 134: 171-179.
- Zheng, X., Güller, S., Beissert, T., Puccetti, E. and Ruthardt, M. 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., Schwartz, S., Taubald, A., Jost, E., Lipp, T., Schneller, F., Diedrich, H., Thomssen, H., Mey, U.J., Eucker, J., Rieder, H., Gökbuget, N., Hoelzer, D. and Thiel E. 2007. Atypical BCR-ABL mRNA transcripts in adult acute lymphoblastic leukemia. Haematologica 92: 1699-1702.
- 5. Cottin, V., Dupuis-Girod, S., Lesca, G. and Cordier, J.F. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (Rendu-Osler disease). Respiration 74: 361-378.
- Fernandez-L, A., Garrido-Martin, E.M., Sanz-Rodriguez, F., Pericacho, M., Rodriguez-Barbero, A., Eleno, N., Lopez-Novoa, J.M., Düwell, A., Vega, M.A., Bernabeu, C. and Botella, L.M. 2007. Gene expression fingerprinting for human hereditary hemorrhagic telangiectasia. Hum. Mol. Genet. 16: 1515-1533.
- Gardiner, J., Barton, D., Marc, J and Overall, R. 2007. Potential role of tubulin acetylation and microtubule-based protein trafficking in familial dysautonomia. Traffic 8: 1145-1149.
- Hims, M.M., Shetty, R.S., Pickel, J., Mull, J., Leyne, M., Liu, L., Gusella, J.F. and Slaugenhaupt, S.A. 2007. A humanized IKBKAP transgenic mouse models a tissue-specific human splicing defect. Genomics 90: 389-396.
- Temtamy, S.A., Kamel, A.K., Ismail, S., Helmy, N.A., Aglan, M.S., El Gammal, M., El Ruby, M. and Mohamed, A.M. 2007. Phenotypic and cytogenetic spectrum of 9p trisomy. Genet. Couns. 18: 29-48.

CHROMOSOMAL LOCATION

Genetic locus: 5830415F09Rik (mouse) mapping to 4 B1.

SOURCE

5830415F09Rik (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of 5830415F09Rik of mouse origin.

PRODUCT

Each vial contains 200 μ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-240183 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

5830415F09Rik (K-18) is recommended for detection of 5830415F09Rik of mouse origin and RGD1305420 of rat origin of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 5830415F09Rik siRNA (m): sc-140402, 5830415F09Rik shRNA Plasmid (m): sc-140402-SH and 5830415F09Rik shRNA (m) Lentiviral Particles: sc-140402-V.

Molecular Weight of 5830415F09Rik isoform 1: 48 kDa.

Molecular Weight of 5830415F09Rik isoform 2: 54 kDa.

Molecular Weight of 5830415F09Rik isoform 3: 46 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.