SANTA CRUZ BIOTECHNOLOGY, INC.

TTC39B (E-13): sc-165821

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TTC39B (tetratricopeptide repeat domain 39B) is a 682 amino acid protein that belongs to the TTC39 family and contains 2 TPR repeats. Existing as seven alternatively spliced isoforms, the TTC39B gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, mosquito and *C. elegans,* and maps to human chromosome 9p22.3. Chromosome 9 consists of about 145 million bases and 4% of the human genome and encodes 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 gene encoding 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.

REFERENCES

1. Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. Nature 429: 369-374.
2. Vanderwerf, S.M., et al. 2009. TLR8-dependent TNF-α overexpression in Fanconi anemia group C cells. Blood 114: 5290-5298.
3. Waterworth, D.M., et al. 2010. Genetic variants influencing circulating lipid levels and risk of coronary artery disease. Arterioscler. Thromb. Vasc. Biol. 30: 2264-2276.
4. Online Mendelian Inheritance in Man, OMIM™. 2010. Johns Hopkins University, Baltimore, MD. MIM Number: 613574. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Teslovich, T.M., et al. 2010. Biological, clinical and population relevance of 95 loci for blood lipids. Nature 466: 707-713.
6. Park, M.H., et al. 2011. Genetic loci associated with lipid concentrations and cardiovascular risk factors in the Korean population. J. Med. Genet. 48: 10-15.

CHROMOSOMAL LOCATION

Genetic locus: TTC39B (human) mapping to 9p22.3; Ttc39b (mouse) mapping to 4 C3.

SOURCE

TTC39B (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TTC39B of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-165821 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

TTC39B (E-13) is recommended for detection of TTC39B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with TTC39C.

Suitable for use as control antibody for TTC39B siRNA (h): sc-92485, TTC39B siRNA (m): sc-154776, TTC39B shRNA Plasmid (h): sc-92485-SH, TTC39B shRNA Plasmid (m): sc-154776-SH, TTC39B shRNA (h) Lentiviral Particles: sc-92485-V and TTC39B shRNA (m) Lentiviral Particles: sc-154776-V.

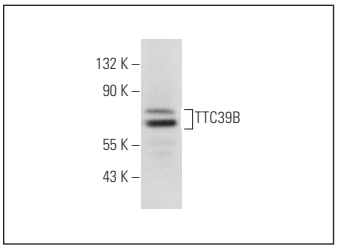
Molecular Weight of TTC39B isoforms: 23/59/67/70/75/77 kDa.

Positive Controls: THP-1 cell lysate: sc-2238.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: 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.

DATA



TTC39B (E-13): sc-165821. Western blot analysis of TTC39B expression in THP-1 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.