SANTA CRUZ BIOTECHNOLOGY, INC.

FOPNL (E-15): sc-242074

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

FOPNL, also known as FLJ31153 or DKFZp686N1651, is a 174 amino acid protein that contains one LisH domain. The gene that encodes FOPNL maps to human chromosome 16. 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 erythematosis 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 FOPNL gene product has been provisionally designated FOPNL pending further characterization.

REFERENCES

1. Ben Hamida, C., Cavalier, L., Belal, S., Sanhaji, H., Nadal, N., Barhoumi, C., M'Rissa, N., Marzouki, N., Mandel, J.L., Ben Hamida, M., Koenig, M. and Hentati, F. 1997. Homozygosity mapping of giant axonal neuropathy gene to chromosome 16q24.1. Neurogenetics 1: 129-133.
2. Karlsson, J., Zhao, X., Lonskaya, I., Neptin, M., Holmdahl, R. and Andersson, A. 2003. Novel quantitative trait loci controlling development of experimental autoimmune encephalomyelitis and proportion of lymphocyte subpopulations. J. Immunol. 170: 1019-1026.
3. Forabosco, P., Gorman, J.D., Cleveland, C., Kelly, J.A., Fisher, S.A., Ortmann, W.A., Johansson, C., Johanneson, B., Moser, K.L., Gaffney, P.M., Tsao, B.P., Cantor, R.M., Alarcón-Riquelme, M.E., Behrens, T.W., Harley, J.B., Lewis, C.M. and Criswell, L.A. 2006. Meta-analysis of genome-wide linkage studies of systemic lupus erythematosus. Genes Immun. 7: 609-614.
4. Carneiro, L.A., Travassos, L.H. and Girardin, S.E. 2007. Nod-like receptors in innate immunity and inflammatory diseases. Ann. Med. 39: 581-593.
5. King, K., Bagnall, R., Fisher, S.A., Sheikh, F., Cuthbert, A., Tan, S., Mundy, N.I., Rosenstiel, P., Schreiber, S., Mathew, C.G. and Roberts, R.G. 2007. Identification, evolution, and association study of a novel promoter and first exon of the human NOD2 (CARD15) gene. Genomics 90: 493-501.
6. Gervasini, C., Castronovo, P., Bentivegna, A., Mottadelli, F., Faravelli, F., Giovannucci-Uzielli, M.L., Pessagno, A., Lucci-Cordisco, E., Pinto, A.M., Salviati, L., Selicorni, A., Tenconi, R., Neri, G. and Larizza, L. 2007. High frequency of mosaic CREBBP deletions in Rubinstein-Taybi syndrome patients and mapping of somatic and germ-line breakpoints. Genomics 90: 567-573.

CHROMOSOMAL LOCATION

Genetic locus: FOPNL (human) mapping to 16p13.11; Fopnl (mouse) mapping to 16 A1.

SOURCE

FOPNL (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FOPNL 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-242074 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FOPNL (E-15) is recommended for detection of FOPNL of mouse, rat and human 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).

FOPNL (E-15) is also recommended for detection of FOPNL in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for C16orf63 siRNA (h): sc-93334, FOPNL siRNA (m): sc-108121, C16orf63 shRNA Plasmid (h): sc-93334-SH, FOPNL shRNA Plasmid (m): sc-108121-SH, C16orf63 shRNA (h) Lentiviral Particles: sc-93334-V and FOPNL shRNA (m) Lentiviral Particles: sc-108121-V.

Molecular Weight of FOPNL: 20 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) 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.

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.