

PDZD9 (C-13): sc-137324

BACKGROUND

PDZD9 (PDZ domain containing 9) is a 264 amino acid protein that contains one PDZ (DHR) domain and participates in protein binding. Conserved in chimpanzee, dog, cow, mouse and rat, PDZD9 exists as two alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 16p12.1. Chromosome 16 encodes over 900 genes, approximately 90 million base pairs, makes up nearly 3% of human cellular DNA and is associated with a variety of genetic disorders. Giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth, and the rare disorder Rubinstein-Taybi syndrome, characterized by mental retardation and predisposition to tumor growth and white blood cell neoplasias, are associated with chromosome 16. Crohn's disease, a gastrointestinal inflammatory condition, and systemic lupus erythematosus are also associated with chromosome 16.

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., Salvati, 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.
7. Koop, O., Schirmacher, A., Nelis, E., Timmerman, V., De Jonghe, P., Ringelstein, B., Rasic, V.M., Evrard, P., Gärtner, J., Claeys, K.G., Appenzeller, S., Rautenstrauss, B., Hühne, K., Ramos-Arroyo, M.A., Wörle, H., et al. 2007. Genotype-phenotype analysis in patients with giant axonal neuropathy (GAN). *Neuromuscul. Disord.* 17: 624-630.
8. Tattoli, I., Travassos, L.H., Carneiro, L.A., Magalhaes, J.G. and Girardin, S.E. 2007. The nodosome: NOD1 and NOD2 control bacterial infections and inflammation. *Semin. Immunopathol.* 29: 289-301.

CHROMOSOMAL LOCATION

Genetic locus: PDZD9 (human) mapping to 16p12.1.

SOURCE

PDZD9 (C-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of PDZD9 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137324 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PDZD9 (C-13) is recommended for detection of PDZD9 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PDZD9 siRNA (h): sc-93300, PDZD9 shRNA Plasmid (h): sc-93300-SH and PDZD9 shRNA (h) Lentiviral Particles: sc-93300-V.

Molecular Weight of PDZD9 isoforms: 30/23 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.