SANTA CRUZ BIOTECHNOLOGY, INC.

DOCK 8 (N-14): sc-104910

BACKGROUND

DOCK 8 (dedicator of cytokinesis 8) is a 2,099 amino acid protein that contains one DHR-2 (CZH-2) domain and one DHR-1 (CZH-1) domain. One of several members of the DOCK family of cytokinesis-regulating proteins, DOCK 8 functions as a potential guanine nucleotide exchange factor (GEF) that may play a role in protein activation and is thought to influence Actin organization. Defects in the gene encoding DOCK 8 may be associated with the pathogenesis of autosomal dominant mental retardation, possibly due to errors in Actin-based cytoskeletal structure. Multiple isoforms of DOCK 8 exist due to alternative splicing events. The gene encoding DOCK 8 maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome.

REFERENCES

1. MacDermot, K.D. and Hulten, M. 1990. Female with hypohidrotic ectodermal dysplasia and *de novo* (X;9) translocation. Clinical documentation of the AnLy cell line case. Hum. Genet. 84: 577-579.
2. Cote, J.F. and Vuori, K. 2002. Identification of an evolutionarily conserved superfamily of DOCK 180-related proteins with guanine nucleotide exchange activity. J. Cell Sci. 115: 4901-4913.
3. Ruusala, A. and Aspenström, P. 2004. Isolation and characterisation of DOCK 8, a member of the DOCK 180-related regulators of cell morphology. FEBS Lett. 572: 159-166.
4. Takahashi, K., et al. 2006. Homozygous deletion and reduced expression of the DOCK 8 gene in human lung cancer. Int. J. Oncol. 28: 321-328.
5. Vinci, G., et al. 2007. Association of deletion 9p, 46, XY gonadal dysgenesis and autistic spectrum disorder. Mol. Hum. Reprod. 13: 685-689.

CHROMOSOMAL LOCATION

Genetic locus: DOCK8 (human) mapping to 9p24.3; Dock8 (mouse) mapping to 19 B.

SOURCE

DOCK 8 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DOCK 8 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-104910 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

DOCK 8 (N-14) is recommended for detection of DOCK 8 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).

Suitable for use as control antibody for DOCK 8 siRNA (h): sc-92764, DOCK 8 siRNA (m): sc-143137, DOCK 8 shRNA Plasmid (h): sc-92764-SH, DOCK 8 shRNA Plasmid (m): sc-143137-SH, DOCK 8 shRNA (h) Lentiviral Particles: sc-92764-V and DOCK 8 shRNA (m) Lentiviral Particles: sc-143137-V.

Molecular Weight of DOCK 8: 190 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.

RESEARCH USE

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