

# DENND4C (E-17): sc-246431

## BACKGROUND

DENND4C (DENN/MADD domain containing 4C), also known as DENN domain-containing protein 4C, C9orf55, C9orf55B, FLJ20686, bA513M16.3 or DKFZp686I09113, is a 1,673 amino acid multi-pass membrane protein. DENND4C contains a dDENN domain, DENN domain, uDENN domain and a PPR (pentatricopeptide) repeat. As a result of alternative splicing, six DENND4C isoforms exist. The gene encoding DENND4C maps to human chromosome 9, which 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

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2. Zhuang, H., et al. 2006. Lupus-like disease and high interferon levels corresponding to trisomy of the type I interferon cluster on chromosome 9p. *Arthritis Rheum.* 54: 1573-1579.
3. Burmeister, T., et al. 2007. Atypical BCR-ABL mRNA transcripts in adult acute lymphoblastic leukemia. *Haematologica* 92: 1699-1702.
4. Cottin, V., et al. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (rendu-osler disease). *Respiration* 74: 361-378.
5. Zeitz, M.J., et al. 2009. Organization of the amplified type I interferon gene cluster and associated chromosome regions in the interphase nucleus of human osteosarcoma cells. *Chromosome Res.* 17: 305-319.
6. Axelrod, F.B., et al. 2009. Neuroimaging supports central pathology in familial dysautonomia. *J. Neurol.* 257: 198-206.
7. Gold-von Simson, G., et al. 2009. Kinetin in familial dysautonomia carriers: implications for a new therapeutic strategy targeting mRNA splicing. *Pediatr. Res.* 65: 341-346.

## CHROMOSOMAL LOCATION

Genetic locus: DENND4C (human) mapping to 9p22.1; Dennd4c (mouse) mapping to 4 C4.

## SOURCE

DENND4C (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DENND4C of human origin.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## 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-246431 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

DENND4C (E-17) is recommended for detection of DENND4C 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); non cross-reactive with DENND4A or DENND4B.

DENND4C (E-17) is also recommended for detection of DENND4C in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for DENND4C siRNA (h): sc-92869, DENND4C siRNA (m): sc-143004, DENND4C shRNA Plasmid (h): sc-92869-SH, DENND4C shRNA Plasmid (m): sc-143004-SH, DENND4C shRNA (h) Lentiviral Particles: sc-92869-V and DENND4C shRNA (m) Lentiviral Particles: sc-143004-V.

Molecular Weight of DENND4C: 187 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.