

DENND5B (E-16): sc-246435

BACKGROUND

DENND5B (DENN/MADD domain containing 5B) is a 1,274 amino acid single-pass membrane protein containing a dDENN domain, a DENN domain, a PLAT domain, 2 RUN domains and an uDENN domain. Existing as 4 alternatively spliced isoforms, DENND5B is encoded by a gene located on human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a number of skeletal deformities, including hypochondrogenesis, achondrogenesis and Kniest dysplasia. Noonan syndrome, which includes heart and facial developmental defects among the primary symptoms, is caused by a mutant form of PTPN11 gene product, SH-PTP2. Chromosome 12 is also home to a homeobox gene cluster which encodes crucial transcription factors for morphogenesis, and the natural killer complex gene cluster encoding C-type lectin proteins which mediate the NK cell response to MHC I interaction. Trisomy 12p leads to facial development defects, seizure disorders and a host of other symptoms varying in severity depending on the extent of mosaicism and is most severe in cases of complete trisomy.

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CHROMOSOMAL LOCATION

Genetic locus: DENND5B (human) mapping to 12p11.21; Dennd5b (mouse) mapping to 6 G3.

RESEARCH USE

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

SOURCE

DENND5B (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DENND5B 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-246435 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DENND5B (E-16) is recommended for detection of DENND5B 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 other DENND family members.

DENND5B (E-16) is also recommended for detection of DENND5B in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for DENND5B siRNA (h): sc-96051, DENND5B siRNA (m): sc-142767, DENND5B shRNA Plasmid (h): sc-96051-SH, DENND5B shRNA Plasmid (m): sc-142767-SH, DENND5B shRNA (h) Lentiviral Particles: sc-96051-V and DENND5B shRNA (m) Lentiviral Particles: sc-142767-V.

Molecular Weight of DENND5B isoforms 1/2/3/4: 145/149/58/84 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.

PROTOCOLS

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