DNALI1 (N-13): sc-160296

SANTA CRUZ®

BIOTECHNOLOGY

The Power to Question

BACKGROUND

Dyneins are multisubunit, high molecular weight ATPases that interact with microtubules to generate force by converting the chemical energy of ATP into the mechanical energy of movement. Cytoplasmic or axonemal dynein heavy, intermediate, light and light-intermediate chains are all components of minus end-directed motors; complexes that transport cellular cargo toward the central region of the cell. Axonemal dynein motors contain one to three non-identical heavy chains and cause a sliding of microtubules in the axonemes of cilia and flagella in a mechanism necessary for cilia to beat and propel the cell. DNALI1 (dynein, axonemal, light intermediate chain 1), also known as P28, is a 258 amino acid protein involved in flagellar motility. A member of the inner dynein arm light chain family, DNALI1 is widely expressed with highest expression found in testis, and is considered a potential candidate for immotile cilia syndrome (ICS).

CHROMOSOMAL LOCATION

Genetic locus: DNALI1 (human) mapping to 1p34.3; Dnali1 (mouse) mapping to 4 D2.2.

SOURCE

DNALI1 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DNALI1 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-160296 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DNALI1 (N-13) is recommended for detection of DNALI1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

DNALI1 (N-13) is also recommended for detection of DNALI1 in additional species, including equine.

Suitable for use as control antibody for DNALI1 siRNA (h): sc-88537, DNALI1 siRNA (m): sc-143116, DNALI1 shRNA Plasmid (h): sc-88537-SH, DNALI1 shRNA Plasmid (m): sc-143116-SH, DNALI1 shRNA (h) Lentiviral Particles: sc-88537-V and DNALI1 shRNA (m) Lentiviral Particles: sc-143116-V.

Molecular Weight (predicted) of DNALI1: 30 kDa.

Molecular Weight (observed) of DNALI1: 32 kDa.

Positive Controls: DNALI1 (h2): 293T Lysate: sc-116188 or mouse testis extract: sc-2405.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA
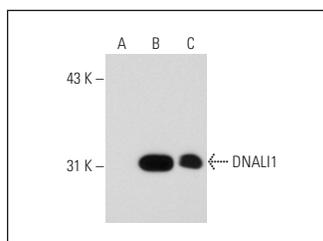
DNALI1 (N-13): sc-160296. Western blot analysis of DNALI1 expression in non-transfected: sc-117752 (**A**) and human DNALI1 transfected: sc-116188 (**B**) 293T whole cell lysates and mouse testis tissue extract (**C**).

DNALI1 (N-13): sc-160296. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic and membrane staining of glandular cells.

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.