

# DNAH11 (L-15): sc-162742

## 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; the complex transports cellular cargos towards 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. DNAH11 (axonemal dynein heavy chain isotype 11) is a 4,523 amino acid microtubule-dependent motor ATPase that is involved in respiratory cilia movement. Mutations in the gene encoding DNAH11 have been linked to Kartagener Syndrome, which is characterized by male sterility.

## REFERENCES

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## RESEARCH USE

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

## CHROMOSOMAL LOCATION

Genetic locus: DNAH11 (human) mapping to 7p15.3; Dnahc11 (mouse) mapping to 12 F2.

## SOURCE

DNAH11 (L-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DNAH11 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-162742 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

DNAH11 (L-15) is recommended for detection of DNAH11 of human origin, DNAHC11 of mouse origin and the corresponding rat homolog 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 DNAH family members.

DNAH11 (L-15) is also recommended for detection of DNAH11 in additional species, including bovine.

Suitable for use as control antibody for DNAH11 siRNA (h): sc-89758, DNAHC11 siRNA (m): sc-143083, DNAH11 shRNA Plasmid (h): sc-89758-SH, DNAHC11 shRNA Plasmid (m): sc-143083-SH, DNAH11 shRNA (h) Lentiviral Particles: sc-89758-V and DNAHC11 shRNA (m) Lentiviral Particles: sc-143083-V.

Molecular Weight of DNAH11: 521 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 Blotting 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](http://www.scbt.com) or our catalog for detailed protocols and support products.