

DNAH8 (N-20): sc-167661

BACKGROUND

Dyneins are multi-subunit, 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. Dynein complexes transport cellular cargos toward the central region of the cell. Containing one to three non-identical heavy chains, axonemal dynein motors cause a sliding of microtubules in the axonemes of cilia and flagella in a mechanism necessary for cilia movement and cell propulsion. DNAH8 (dynein, axonemal, heavy chain 8), also known as hdhc9 or ATPase, is a 4,490 amino acid member of the dynein heavy chain protein family. DNAH8 exists as four isoforms produced by alternative splicing events. DNAH8 is a force-generating protein of respiratory cilia and is thought to be involved in sperm motility.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DNAH8 (human) mapping to 6p21.2; Dnahc8 (mouse) mapping to 17 A3.3.

SOURCE

DNAH8 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DNAH8 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-167661 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DNAH8 (N-20) is recommended for detection of DNAH8 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 DNAH family members.

DNAH8 (N-20) is also recommended for detection of DNAH8 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for DNAH8 siRNA (h): sc-95152, DNAH8 siRNA (m): sc-143082, DNAH8 shRNA Plasmid (h): sc-95152-SH, DNAH8 shRNA Plasmid (m): sc-143082-SH, DNAH8 shRNA (h) Lentiviral Particles: sc-95152-V and DNAH8 shRNA (m) Lentiviral Particles: sc-143082-V.

Molecular Weight of DNAH8 isoforms: 515/510 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.

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.