



DNAH12 (E-17): sc-102484

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. DNAH12 (dynein, axonemal, heavy chain 12), also known as DNAHC12, DHC3, DLP12, DNHD2, HL-19, DNAH7L or DNAHC3, is a 3,092 amino acid protein of cilium axoneme that exists as three alternatively spliced isoforms. A member of the dynein heavy chain family, DNAH12L is involved in sperm flagellar assembly and is encoded by a gene located on human chromosome 3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DNAH12 (human) mapping to 3p14.3; Dnahc12 (mouse) mapping to 14 A3.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

SOURCE

DNAH12 (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DNAH12 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-102484 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DNAH12 (E-17) is recommended for detection of DNAH12 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.

Suitable for use as control antibody for DNAH12 siRNA (h): sc-78218, DNAH12 shRNA Plasmid (h): sc-78218-SH and DNAH12 shRNA (h) Lentiviral Particles: sc-78218-V.

Molecular Weight of DNAH12: 357 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.

PROTOCOLS

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