# Dynein Light Chain (aN-15): sc-15942



The Power to Question

# **BACKGROUND**

Structural proteins in *Arabidopsis thaliana* provide cellular stability, facilitate protein transportation within the cell and are essential for cell growth. Three types of molecular motors are involved in the organization, dynamics and transport processes associated with the cytoskeleton. They include Myosin, which transports cargo along Actin filaments, and Kinesin and Dynein, which transport cargo along microtubules. These proteins regulate many cellular functions, including cell division and expansion, cell-to-cell communication, membrane trafficking and morphogenesis. In addition, the Dynamin-like proteins are GTP-binding proteins involved in vesicle trafficking. Extensin is a structural protein that may be involved in cell wall assembly, while Expansin is a cell wall loosening protein that induces stress relaxation and extension of cell walls and may control organ size, morphology and abscission. Also, xyloglucan (XG), a major hemicellulose in plants, is modified by the fucosyltransferase, XG FTase, which adds a terminal fucosyl residue to XG.

# **REFERENCES**

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# **SOURCE**

Dynein Light Chain (aN-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Dynein Light Chain of *Arabidopsis thaliana* origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-15942 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

Dynein Light Chain (aN-15) is recommended for detection of Dynein Light Chain of *Arabidopsis thaliana* 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).

# **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.

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