

## ARG59106 anti-DYNLT1 antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes DYNLT1
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	DYNLT1
Species	Human
Immunogen	Recombinant protein corresponding to M1-A80 of Human DYNLT1.
Conjugation	Un-conjugated
Alternate Names	Dynein light chain Tctex-type 1; CW-1; T-complex testis-specific protein 1 homolog; TCTEL1; tctex-1; Protein CW-1

### Application Instructions

Application table	Application	Dilution
	FACS	1:150 - 1:500
	ICC/IF	1:200 - 1:1000
	IHC-P	0.5 - 1 µg/ml
	WB	0.1 - 0.5 µg/ml

**Application Note** IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min.  
\* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

Form	Liquid
Purification	Affinity purified.
Buffer	0.9% NaCl, 0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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Gene Symbol

DYNLT1

Gene Full Name

dynein, light chain, Tctex-type 1

Background

This gene encodes a component of the motor complex, cytoplasmic dynein, which transports cellular cargo along microtubules in the cell. The encoded protein regulates the length of primary cilia which are sensory organelles found on the surface of cells. The protein encoded by this gene interacts with viral proteins, like the minor capsid protein L2 of human papillomavirus, and is required for dynein-mediated delivery of the viral nucleic acid to the host nucleus. This protein interacts with oncogenic nucleoporins to disrupt gene regulation and cause leukemic transformation. Pseudogenes of this gene are present on chromosomes 4 and 17. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Apr 2014]

Function

Acts as one of several non-catalytic accessory components of the cytoplasmic dynein 1 complex that are thought to be involved in linking dynein to cargos and to adapter proteins that regulate dynein function. Cytoplasmic dynein 1 acts as a motor for the intracellular retrograde motility of vesicles and organelles along microtubules. Binds to transport cargos and is involved in apical cargo transport such as rhodopsin-bearing vesicles in polarized epithelia. Is involved in intracellular targeting of D-type retrovirus gag polyproteins to the cytoplasmic assembly site. May also be a accessory component of axonemal dynein.

Plays a role in neuronal morphogenesis; the function is independent of cytoplasmic dynein and seems to be coupled to regulation of the actin cytoskeleton by enhancing Rac1 activity. The function in neurogenesis may be regulated by association with a G-protein beta-gamma dimer. May function as a receptor-independent activator of heterotrimeric G-protein signaling; the activation appears to be independent of a nucleotide exchange. Plays a role in regulating neurogenesis; inhibits the genesis of neurons from precursor cells during cortical development presumably by antagonizing ARHGEF2. Involved in the regulation of mitotic spindle orientation (By similarity). [UniProt]

Calculated Mw

12 kDa

PTM

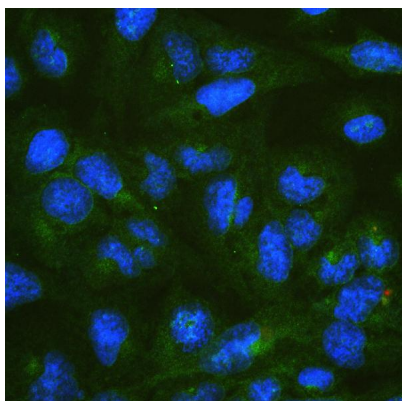
Phosphorylated by BMPR2; the phosphorylation is abolished by BMPR2 mutations in exon 12 which lead to truncated forms of BMPR2 and which are linked to primary pulmonary hypertension (PPH1) [MIM:178600]. The phosphorylation status is proposed to regulate the association with the cytoplasmic dynein complex and may have role in cytoplasmic dynein cargo release (By similarity). [UniProt]

Cellular Localization

Golgi apparatus. Cytoplasm. Cytoplasm, cytoskeleton, spindle. Note=Localizes to mitotic spindles. [UniProt]

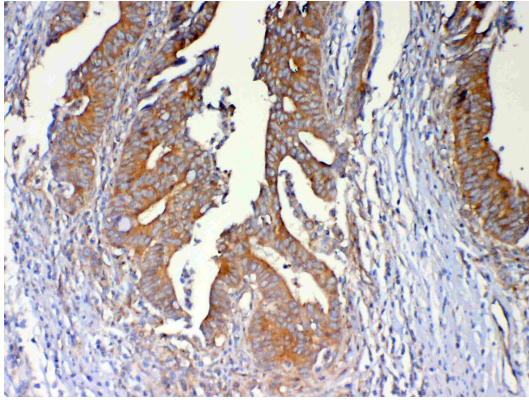
## Images

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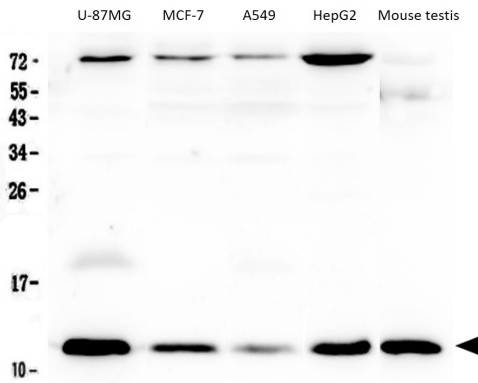
ARG59106 anti-DYNLT1 antibody ICC/IF image

Immunofluorescence: U2OS cells were blocked with 10% goat serum and then stained with ARG59106 anti-DYNLT1 antibody (green) at 2 µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



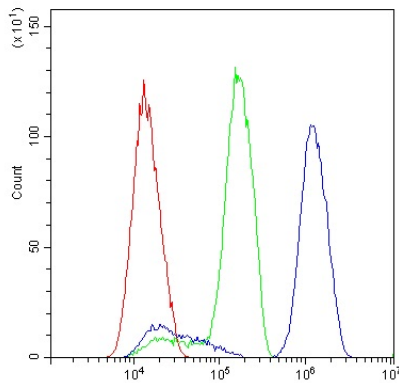
ARG59106 anti-DYNLT1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human colon cancer tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59106 anti-DYNLT1 antibody at 1  $\mu\text{g}/\text{ml}$ , overnight at 4°C.



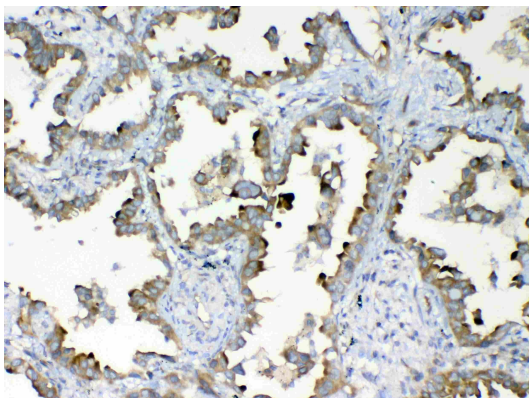
ARG59106 anti-DYNLT1 antibody WB image

Western blot: 50  $\mu\text{g}$  of samples under reducing conditions. U-87MG, MCF-7, A549, HepG2 and Mouse testis lysates stained with ARG59106 anti-DYNLT1 antibody at 0.5  $\mu\text{g}/\text{ml}$ , overnight at 4°C.



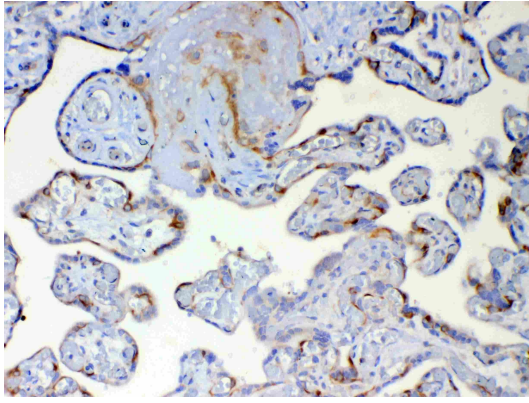
ARG59106 anti-DYNLT1 antibody FACS image

Flow Cytometry: SiHa cells were blocked with 10% normal goat serum and then stained with ARG59106 anti-DYNLT1 antibody (blue) at 1  $\mu\text{g}/10^6$  cells for 30 min at 20°C, followed by incubation with DyLight<sup>®</sup>488 labelled secondary antibody. Isotype control antibody (green) was rabbit IgG (1  $\mu\text{g}/10^6$  cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



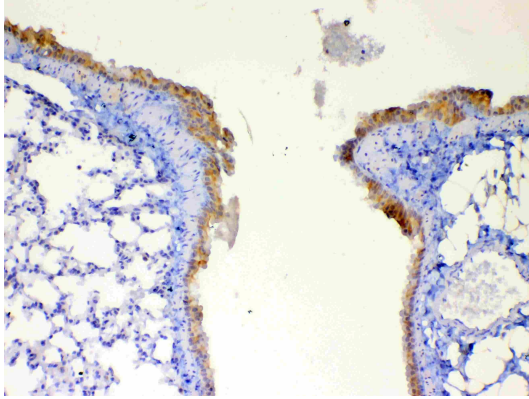
ARG59106 anti-DYNLT1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59106 anti-DYNLT1 antibody at 1  $\mu\text{g}/\text{ml}$ , overnight at 4°C.



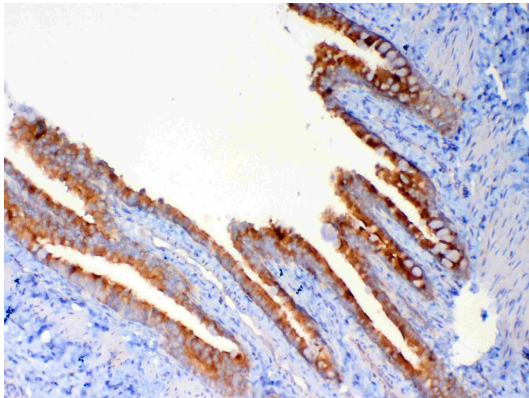
ARG59106 anti-DYNLT1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human placenta tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59106 anti-DYNLT1 antibody at 1  $\mu$ g/ml, overnight at 4°C.



ARG59106 anti-DYNLT1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse lung tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59106 anti-DYNLT1 antibody at 1  $\mu$ g/ml, overnight at 4°C.



ARG59106 anti-DYNLT1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat lung tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59106 anti-DYNLT1 antibody at 1  $\mu$ g/ml, overnight at 4°C.