

Product Name: KD-Validated DYNLT1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00386**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:100-1:1,000; ICC 1:100-1:1,000; IHC-P 1:50-1:100
Molecular Weight	Calculated MW: 12.5kDa

Antigen Information

Gene Name	DYNLT1 DYNLT1; Dynein Light Chain Tctex-Type 1; TCTEX1; Tctex-1; TCTEL1; T-Complex-Associated-
Alternative Names	Testis-Expressed 1-Like 1; T-Complex Testis-Specific Protein 1 Homolog; Protein CW-1; TCTEX-1; CW-1
Gene ID	6993.0
SwissProt ID	P63172
Immunogen	Recombinant protein of human TCTEX-1

Background

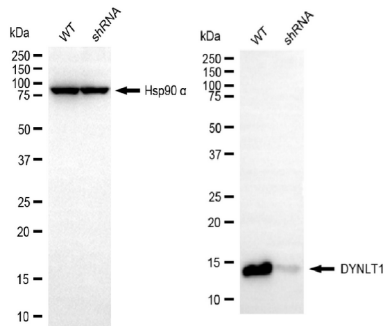
This gene encodes a component of the motor complex, cytoplasmic dynein, which transports cellular cargo along microtubules in the cell. The encoded protein regulates the length of primary cilia which are sensory organelles found on the surface of cells.

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]

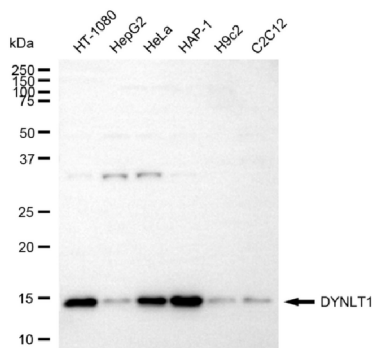
Research Area

Microbiology, Signal Transduction

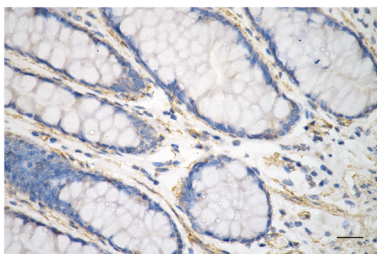
Image Data



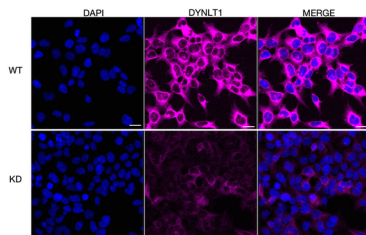
Western blotting analysis using DYNLT1 antibody (KVA00386). DYNLT1 expression in wild-type (WT) and DYNLT1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with DYNLT1 antibody (KVA00386, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



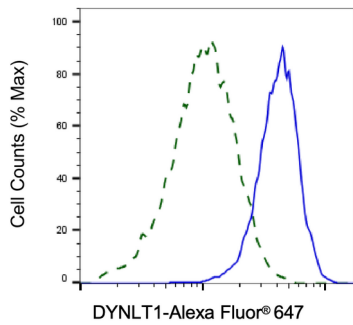
Western blotting analysis using DYNLT1 antibody (KVA00386). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with DYNLT1 antibody (KVA00386, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



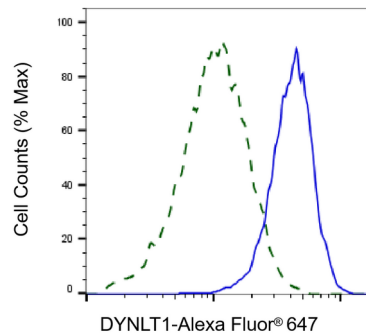
Immunohistochemistry was performed on paraffin-embedded human sigmoid colon carcinoma using DYNLT1 antibody (KVA00386, 1:100). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HeLa cells using DYNLT1 antibody (KVA00386, 1:1,000). Top panel: wild-type (WT); Bottom panel: DYNLT1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; DYNLT1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Validation of DYNLT1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with DYNLT1 antibody (KVA00386, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of DYNLT1 expression in HT-1080 cells using DYNLT1 antibody (KVA00386, 1:2,000). Green, isotype control; red, DYNLT1.