
Product Name: KD-Validated DYNLL1 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVA01103

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 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 10.4kDa

Antigen Information

Gene Name	DYNLL1
Alternative Names	DYNLL1; Dynein Light Chain LC8-Type 1; DLC1; DLC8; PIN; DNCL1; LC8; Protein Inhibitor Of Neuronal Nitric Oxide Synthase; Dynein, Cytoplasmic, Light Polypeptide 1; Dynein Light Chain 1, Cytoplasmic; 8 KDa Dynein Light Chain; DNCLC1; HdLc1; HDLC1; Cytoplasmic Dynein Light Polypeptide; LC8a
Gene ID	8655.0
SwissProt ID	P63167
Immunogen	A synthesized peptide derived from human DYNLL1

Background

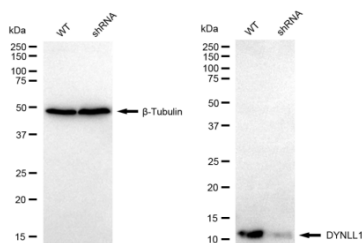
Cytoplasmic dyneins are large enzyme complexes with a molecular mass of about 1,200 kD. They contain two force-producing

heads formed primarily from dynein heavy chains, and stalks linking the heads to a basal domain, which contains a varying number of accessory intermediate chains. The complex is involved in intracellular transport and motility. The protein described in this record is a light chain and exists as part of this complex but also physically interacts with and inhibits the activity of neuronal nitric oxide synthase. Binding of this protein destabilizes the neuronal nitric oxide synthase dimer, a conformation necessary for activity, and it may regulate numerous biologic processes through its effects on nitric oxide synthase activity. Alternate transcriptional splice variants have been characterized. [provided by RefSeq, Jul 2008]

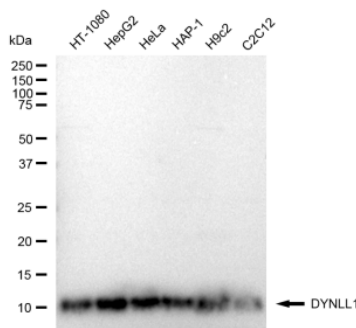
Research Area

Cell Biology, Neuroscience, Signal Transduction, Epigenetics and Nuclear Signaling, Cancer, Metabolism

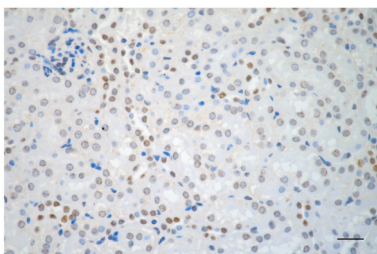
Image Data



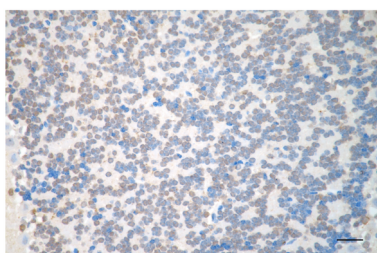
Western blotting analysis using DYNLL1 antibody (KVA01103). DYNLL1 expression in wild type (WT) and DYNLL1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with DYNLL1 antibody (KVA01103, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



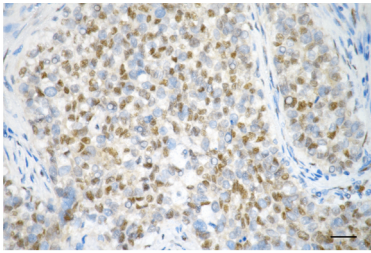
Western blotting analysis using DYNLL1 antibody (KVA01103). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with DYNLL1 antibody (KVA01103, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



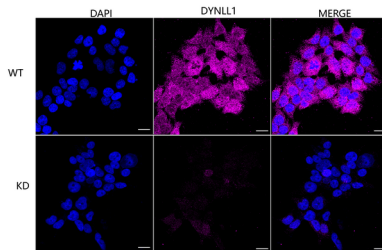
Immunohistochemistry was performed on paraffin-embedded mouse kidney using DYNLL1 antibody (KVA01103, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



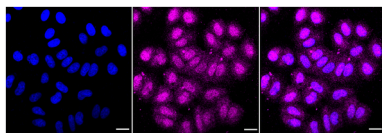
Immunohistochemistry was performed on paraffin-embedded mouse brain using DYNLL1 antibody (KVA01103, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



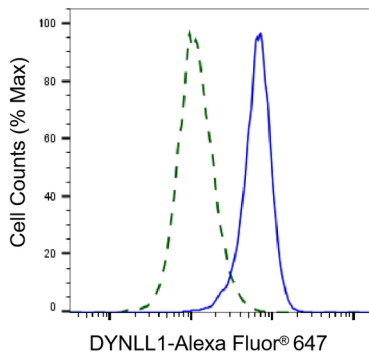
Immunohistochemistry was performed on paraffin-embedded human breast carcinoma using DYNLL1 antibody (KVA01103, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 μ m.



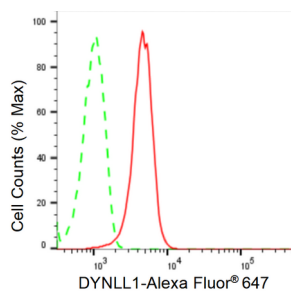
Immunocytochemical staining of HeLa cells using DYNLL1 antibody (KVA01103, 1:1,000). Top panel: wild-type (WT); Bottom panel: DYNLL1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; DYNLL1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 μ m. Permeabilization: Triton.



Immunocytochemical staining of HepG2 cells with DYNLL1 antibody (KVA01103, 1:1,000). Nuclei were stained blue with DAPI; DYNLL1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μ m.



Validation of DYNLL1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with DYNLL1 antibody (KVA01103, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of DYNLL1 expression in HepG2 cells using DYNLL1 antibody (KVA01103, 1:2,000). Green, isotype control; red, DYNLL1.