# Anti-DYNLL1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R013053

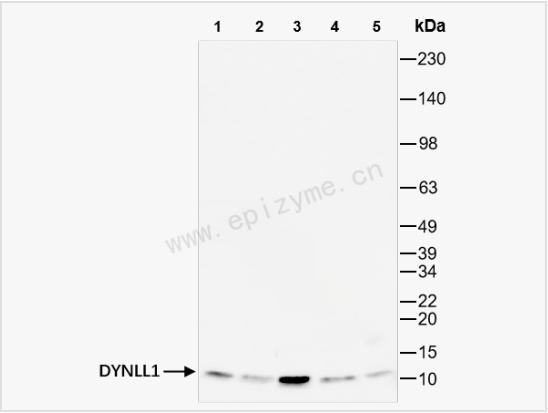
## Product Information

| | |
|---|---|
| Application | WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA |
| Reactivity | Human, Rat |
| Dilution | WB 1:1,000~1:3,000; IHC-P 1:100~1:200; IF 1:100~1:200 |
| Host | Rabbit |
| Clonality | Monoclonal |
| Clone No. | 42K18L41 |
| Isotype | IgG |
| Label | Unconjugated |
| Immunogen | A synthesized peptide derived from human DYNLL1 |
| Format | Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3. |
| Storage | Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage. |
| Precautions | Anti-DYNLL1 Rabbit mAb [42K18L41] is for research use only and not for use in diagnostic or therapeutic procedures. |

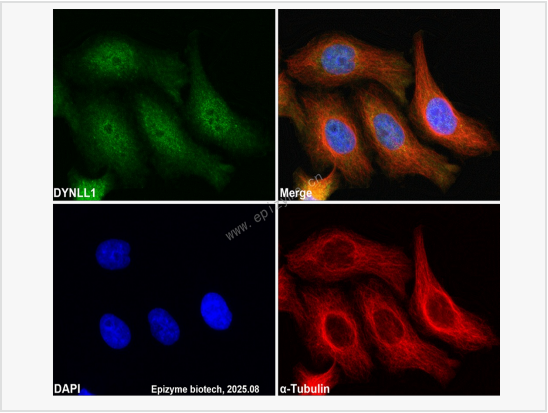
## Protein Information

| | |
|---|---|
| Synonyms | 8 kDa dynein light chain; 8kDLC; Cytoplasmic dynein light polypeptide; DLC1; DLC8; DNCL1; DNCLC1; DYL1_HUMAN; Dynein , cytoplasmic, light chain 1; Dynein light chain 1 cytoplasmic; Dynein light chain 1, cytoplasmic; Dynein light chain LC8 type 1; Dynein light chain LC8-type 1; Dynein, cytoplasmic, light polypeptide 1; Dynein, light chain, LC8-type 1; DYNLL1; HDLC1; LC8; LC8a; MGC126137; MGC126138; MGC72986; PIN; Protein inhibitor of neuronal nitric oxide synthase; Protein inhibitor of neuronal NOS. |
| Calculated MW | Calculated MW: 10 kDa; Observed MW: 10 kDa |
| Uniprot ID | P63167 |
| Gene ID | 8655 |
| 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] |
| Cellular Location | Cytoplasm, cytoskeleton. Nucleus. Mitochondrion. Upon induction of apoptosis translocates together with BCL2L11 to mitochondria. |

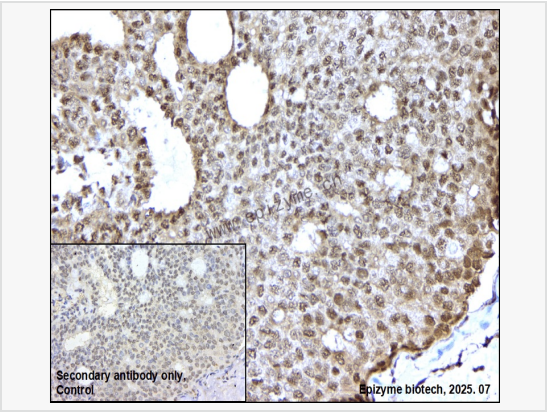
## Validation Images




Western Blot - Anti-DYNLL1 Rabbit mAb [42K18L41]
All lanes: R013053 at 1:3,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 3: SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysates
Lane 4: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates
Lane 5: Rat brain whole tissue lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 10 kDa
Observed band size: 10 kDa
Developed using the ECL technique (Cat. No. SQ201).




Immunofluorescence - Anti-DYNLL1 Rabbit mAb [42K18L41]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R013053 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).




Immunohistochemistry - Anti-DYNLL1 Rabbit mAb [42K18L41]
Sample: Paraformaldehyde-fixed, paraffin embedded human breast cancer tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R013053 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.