

**DYNLL1 Antibody**  
Rabbit mAb  
Catalog # AP90569

## Specification

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### DYNLL1 Antibody - Product Information

Application	WB, IHC, ICC, IP
Primary Accession	<a href="#">P63167</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
DLC8; DLC1; DNCL1; DYNLL1; HDLC1; LC8a; PIN;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	10366 Da

### DYNLL1 Antibody - Additional Information

Purification	<b>Affinity-chromatography</b>
Immunogen	<b>A synthesized peptide derived from human DYNLL1</b>
Description	<b>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. May play a role in changing or maintaining the spatial distribution of cytoskeletal structures.</b>
Storage Condition and Buffer	<b>Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.</b>

### DYNLL1 Antibody - Protein Information

**Name** DYNLL1 {ECO:0000303|Ref.9, ECO:0000312|HGNC:HGNC:15476}

#### 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 (By similarity). Cytoplasmic dynein 1 acts as a motor for the intracellular retrograde motility of vesicles and organelles along microtubules (By similarity). May play a role in changing or maintaining the spatial distribution of cytoskeletal structures (By similarity). In

addition to its role in cytoskeleton and transport, acts as a protein-protein adapter, which inhibits and/or sequesters target proteins (PubMed:<a href="http://www.uniprot.org/citations/10198631" target="\_blank">10198631</a>, PubMed:<a href="http://www.uniprot.org/citations/15193260" target="\_blank">15193260</a>, PubMed:<a href="http://www.uniprot.org/citations/15891768" target="\_blank">15891768</a>, PubMed:<a href="http://www.uniprot.org/citations/16684779" target="\_blank">16684779</a>, PubMed:<a href="http://www.uniprot.org/citations/30464262" target="\_blank">30464262</a>, PubMed:<a href="http://www.uniprot.org/citations/37696958" target="\_blank">37696958</a>). Involved in the response to DNA damage by acting as a key regulator of DNA end resection: when phosphorylated at Ser-88, recruited to DNA double-strand breaks (DSBs) by TP53BP1 and acts by disrupting MRE11 dimerization, thereby inhibiting DNA end resection (PubMed:<a href="http://www.uniprot.org/citations/30464262" target="\_blank">30464262</a>, PubMed:<a href="http://www.uniprot.org/citations/37696958" target="\_blank">37696958</a>). In a subset of DSBs, DYNLL1 remains unphosphorylated and promotes the recruitment of the Shieldin complex (PubMed:<a href="http://www.uniprot.org/citations/37696958" target="\_blank">37696958</a>). Binds and inhibits the catalytic activity of neuronal nitric oxide synthase/NOS1 (By similarity). Promotes transactivation functions of ESR1 and plays a role in the nuclear localization of ESR1 (PubMed:<a href="http://www.uniprot.org/citations/15891768" target="\_blank">15891768</a>, PubMed:<a href="http://www.uniprot.org/citations/16684779" target="\_blank">16684779</a>). Regulates apoptotic activities of BCL2L11 by sequestering it to microtubules (PubMed:<a href="http://www.uniprot.org/citations/10198631" target="\_blank">10198631</a>, PubMed:<a href="http://www.uniprot.org/citations/15193260" target="\_blank">15193260</a>). Upon apoptotic stimuli the BCL2L11-DYNLL1 complex dissociates from cytoplasmic dynein and translocates to mitochondria and sequesters BCL2 thus neutralizing its antiapoptotic activity (PubMed:<a href="http://www.uniprot.org/citations/10198631" target="\_blank">10198631</a>, PubMed:<a href="http://www.uniprot.org/citations/15193260" target="\_blank">15193260</a>).

#### Cellular Location

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Chromosome. Cytoplasm, cytoskeleton. Nucleus Mitochondrion. Note=Upon induction of apoptosis translocates together with BCL2L11 to mitochondria (PubMed:18084006). Recruited to DNA double-strand breaks (DSBs) by TP53BP1 when phosphorylated at Ser-88 (PubMed:37696958)

#### Tissue Location

Ubiquitous (PubMed:8628263). Expressed in testis (PubMed:22965910).

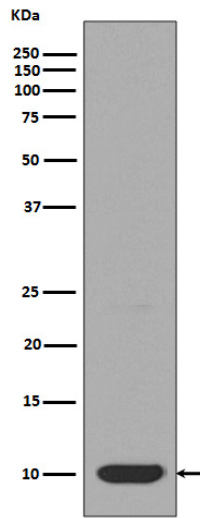
#### DYNLL1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### DYNLL1 Antibody - Images





Western blot analysis of DYNLL1 expression in HeLa cell lysate.