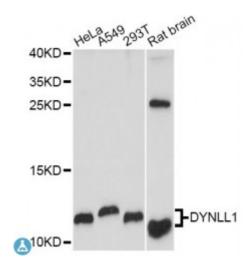


## **Anti-DYNLL1 Antibody**



**Description** 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.

Model STJ116707

**Host** Rabbit

**Reactivity** Human, Rat

**Applications** WB

**Immunogen** A synthetic peptide corresponding to a sequence within amino acids 1-89 of

human DYNLL1 (NP\_003737.1).

**Gene ID** <u>8655</u>

Gene Symbol DYNLL1

**Dilution range** WB 1:500 - 1:2000

Tissue Specificity Ubiquitous

**Purification** Affinity purification

**Note** For Research Use Only (RUO).

**Protein Name** Dynein light chain 1 cytoplasmic 8 kDa dynein light chain DLC8 Dynein light

chain LC8-type 1 Protein inhibitor of neuronal nitric oxide synthase PIN

Molecular Weight 10.366 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Storage Instruction** Store at -20C. Avoid freeze / thaw cycles.

Database Links HGNC:154760MIM:601562Reactome:R-HSA-111446

Alternative Names Dynein light chain 1 cytoplasmic 8 kDa dynein light chain DLC8 Dynein light

chain LC8-type 1 Protein inhibitor of neuronal nitric oxide synthase PIN

**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, May play a role in changing or maintaining the

spatial distribution of cytoskeletal structures

Cellular Localization Cytoplasm, cytoskeleton, Nucleus, Mitochondrion,

**Post-translational** Phosphorylation at Ser-88 appears to control the dimer-monomer transition,

Modifications According to PubMed:15193260, it is phosphorylated at Ser-88 by PAK1,

however, according to PubMed:18650427, the DYNLL1 dimer is not accessible for PAK1 and the phosphorylation could not be demonstrated in

vitro,

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