

Product datasheet

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ARG41653 anti-DYNLL1 / PIN antibody

Package: 100 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes DYNLL1 / PIN

Tested Reactivity Hu, Ms, Rat

Tested Application ICC/IF, IHC-P, IP, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name DYNLL1 / PIN

Species Human

Immunogen Synthetic peptide of Human DYNLL1 / PIN.

Conjugation Un-conjugated

Alternate Names LC8a; Dynein light chain 1, cytoplasmic; PIN; DNCLC1; Protein inhibitor of neuronal nitric oxide

synthase; LC8; DLC8; 8 kDa dynein light chain; DLC1; DNCL1; Dynein light chain LC8-type 1; hdlc1

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	IP	1:50
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HeLa	
Observed Size	10 kDa	

Properties

Form	Liquid	
Purification	Affinity purified.	
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.	
Preservative	0.02% Sodium azide	
Stabilizer	50% Glycerol	
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw	

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol

DYNLL1

Gene Full Name

dynein, light chain, LC8-type 1

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]

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.

Binds and inhibits the catalytic activity of neuronal nitric oxide synthase.

Promotes transactivation functions of ESR1 and plays a role in the nuclear localization of ESR1.

Regulates apoptotic activities of BCL2L11 by sequestering it to microtubules. Upon apoptotic stimuli the BCL2L11-DYNLL1 complex dissociates from cytoplasmic dynein and translocates to mitochondria and sequesters BCL2 thus neutralizing its antiapoptotic activity. [UniProt]

Calculated Mw

10 kDa

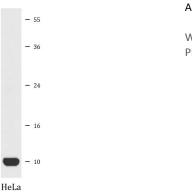
PTM

Phosphorylation at Ser-88 appears to control the dimer-monomer transition. 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. [UniProt]

Cellular Localization

Cytoplasm, cytoskeleton. Nucleus. Mitochondrion. Note=Upon induction of apoptosis translocates together with BCL2L11 to mitochondria. [UniProt]

Images



ARG41653 anti-DYNLL1 / PIN antibody WB image

Western blot: HeLa cell lysate stained with ARG41653 anti-DYNLL1 / PIN antibody.