ARG57056
anti-DYNLL1 / PIN antibody [13C9]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [13C9] recognizes DYNLL1 / PIN
Tested Reactivity	Hu
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Clone	13C9
Isotype	IgG2b, kappa
Target Name	DYNLL1 / PIN
Species	Human
Immunogen	Recombinant fragment corresponding to aa. 1-89 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
WB	Assay-dependent

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

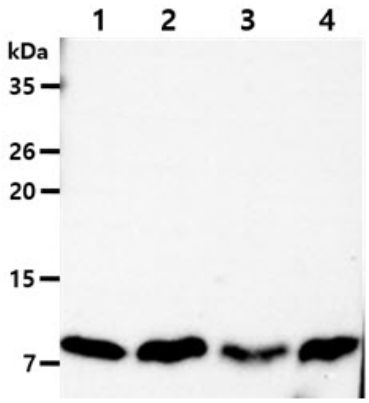
Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% Glycerol
Concentration	1 mg/ml
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 cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 8655 Human Swiss-port # P63167 Human
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.

Images



ARG57056 anti-DYNLL1 / PIN antibody [13C9] WB image

Western blot: 40 µg of 1) HeLa, 2) A549, 3) 293T and 4) HepG2 cell lysates stained with ARG57056 anti-DYNLL1 / PIN antibody [13C9] at 1:1000 dilution.