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DYNLL1/PIN Rabbit mAb

Catalog # AP75374

Product Information

Application	WB, IHC-P, FC, IP
Primary Accession	P63167
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	10366

Additional Information

Gene ID	8655
Other Names	DYNLL1
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A FC~~1:200-1:2000 IP~~1:20-1:50
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

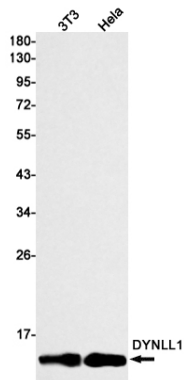
Name	DYNLL1 {ECO:0000303|Ref.9, ECO:0000312|HGNC:HGNC:15476}
Function	Component of dynein, a family of motor proteins essential for movement along microtubules (By similarity). Required for structural and functional integrity of cilia (By similarity). Acts as one of several non-catalytic accessory components 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:10198631, PubMed:15193260, PubMed:15891768, PubMed:16684779, PubMed:30464262, PubMed:37696958). 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:30464262, PubMed:37696958). In a subset of DSBs, DYNLL1 remains unphosphorylated and promotes the recruitment of the Shieldin complex (PubMed:37696958). 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:15891768, PubMed:16684779). Regulates apoptotic activities of BCL2L11 by sequestering it to microtubules (PubMed:10198631, PubMed:15193260). Upon apoptotic stimuli the BCL2L11- DYNLL1 complex dissociates from cytoplasmic dynein and translocates to mitochondria and sequesters BCL2 thus neutralizing its antiapoptotic activity (PubMed:10198631, PubMed:15193260).
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).

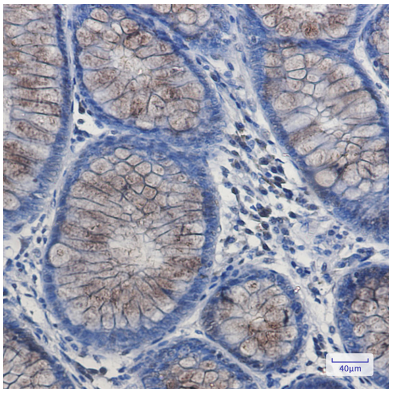
Background

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.

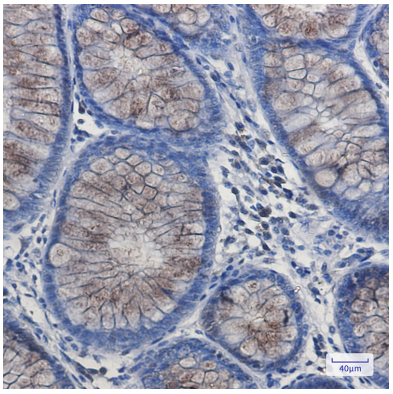
Images

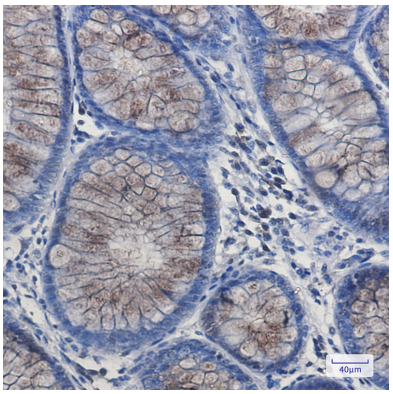


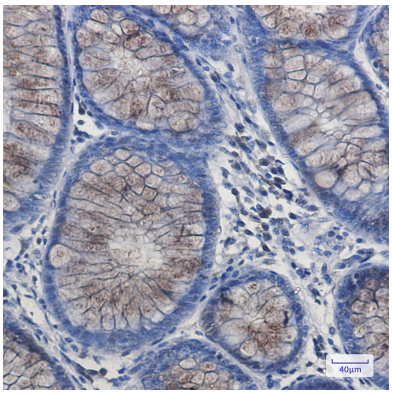
Western blot analysis of DYNLL1 in 3T3, Hela lysates using DYNLL1 antibody.



Immunohistochemistry analysis of paraffin-embedded Human colon cancer using DYNLL1 antibody.High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.







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