

Rabbit Anti-Dynein light chain 2, cytoplasmic antibody

SL14469R

Product Name:	Dynein light chain 2, cytoplasmic
Chinese Name:	胞浆动力蛋白轻链2抗体
Alias:	DYNLL2; Dynein light chain 2, cytoplasmic; Dynein; 8 kDa dynein light chain b; C87222; cytoplasmic; Dlc2; DLC8b; DNCL1B; DYL2_HUMAN; Dynein light chain 2; Dynein light chain LC8 type 2; Dynein light chain LC8-type 2; Dynll2; MGC17810;
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100- 500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	10kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Dynein light chain 2:1-89/89
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Dyneins are multisubunit, high molecular weight ATPases that interact with microtubules to generate force by converting the chemical energy of ATP into the mechanical energy of movement. Cytoplasmic or axonemal Dynein heavy, intermediate,

light and light-intermediate chains are all components of minus end-directed motors; the complex transports cellular cargos towards the central region of the cell. The highly conserved DYNLL proteins were originally identified as light chains for microtubule-based motor protein Dynein. In mammals there are two closely related isoforms expressed, DYNLL1 and DYNLL2 which share 93% sequence identity at the protein level. DYNLL1 (Dynein light chain 1) also designated, DLC8 or PIN (Protein inhibitor of neuronal nitric oxide synthase) has been identified as a protein that interacts with NOS1 resulting in NOS1 inhibition. Dimerization is required for NOS1 activity and DYNLL1 has been shown to destabilize the NOS1 dimer. Nitric oxide may be involved in several processes such as apoptosis, synaptogenesis and neuronal development; thus DYNLL1 is implicated in these processes as well. DYNLL1 is a ubiquitously expressed protein that exhibits high expression in testis and moderate expression in brain. DYNLL2 (Dynein light chain 2) is subject to a unique alternative splicing event which is implicated in Myosin Va binding specificity.

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.

Subcellular Location: Cytoplasm, cytoskeleton.

Similarity: Belongs to the dynein light chain family.

SWISS: Q96FJ2

Gene ID: 140735

Database links:

Entrez Gene: 140735 Human

Entrez Gene: 68097 Mouse

Entrez Gene: 140734 Rat

Omim: 608942 Human

SwissProt: Q96FJ2 Human

	SwissProt: Q9D0M5 Mouse
	<u>SwissProt: Q78P75</u> Rat
	<u>Unigene: 720595</u> Human
	Unigene: 246436 Mouse
	<u>Unigene: 36362</u> Rat
	Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	
	Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by
	boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by
	3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C
	for 30min; Antibody incubation with (Dynein light chain 2, cytoplasmic) Polyclonal
	Antibody, Unconjugated (SL14469R) at 1:200 overnight at 4°C, followed by
	operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.