

# Rabbit Anti-DYNC1I2 antibody

## SL10471R

Product Name:	DYNC1I2
Chinese Name:	胞浆动力蛋白中间链2抗体
Alias:	Cytoplasmic dynein 1 intermediate chain 2; Cytoplasmic dynein intermediate chain 2; Dynein intermediate chain 2, cytosolic; DH IC-2; DC112_HUMAN; DNC12; DNC1C2; Dynein cytoplasmic intermediate polypeptide 2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Horse,Rabbit,Sheep,
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:	70kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human DYNC1I2:61-160/638
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:	The inner- and outer-arm dyneins, which bridge between the doublet microtubules in axonemes, are the force-generating proteins responsible for the sliding movement in axonemes. The intermediate and light chains, thought to form the base of the dynein arm, help mediate attachment and may also participate in regulating dynein activity. This gene encodes an intermediate chain dynein, belonging to the large family of motor

proteins. Mutations in this gene result in abnormal ciliary ultrastructure and function associated with primary ciliary dyskinesia (PCD) and Kartagener syndrome. [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. The intermediate chains mediate the binding of dynein to dynactin via its 150 kDa component (p150-glued) DCNT1. Involved in membrane-transport, such as Golgi apparatus, late endosomes and lysosomes.

#### Subunit:

Homodimer. The cytoplasmic dynein 1 complex consists of two catalytic heavy chains (HCs) and a number of non-catalytic subunits presented by intermediate chains (ICs), light intermediate chains (LICs) and light chains (LCs); the composition seems to vary in respect to the IC, LIC and LC composition. The heavy chain homodimer serves as a scaffold for the probable homodimeric assembly of the respective non-catalytic subunits. The ICs and LICs bind directly to the HC dimer and the LCs assemble on the IC dimer. Interacts with DYNLT1 and DYNLT3. Interacts with DCNT1. Interacts with human adenovirus 5 hexon protein; this interaction probably allows virus intracellular transport.

## Subcellular Location:

Cytoplasm, cytoskeleton.

### Post-translational modifications:

The phosphorylation status of Ser-90 appears to be involved in dynactin-dependent target binding.

### Similarity:

Belongs to the dynein intermediate chain family. Contains 7 WD repeats.

# SWISS: 013409

**Gene ID:** 1781

### Database links:

Entrez Gene: 1781Human

Entrez Gene: 13427 Mouse

Entrez Gene: 116659Rat

	Omim: 603331Human
	SwissProt: Q13409Human
	SwissProt: O88487Mouse
	SwissProt: Q62871Rat
	Unigene: 546250Human
	Unigene: 249479Mouse
	Unigene: 11014Rat
	<b>Important Note:</b> This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	MMM Contraction of the second se
	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 (DYNC1I2) Polyclonal Antibody,
	Unconjugated (SL10471R) at 1:400 overnight at 4°C, followed by operating

according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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