10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DYNC1I1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54269

Specification

DYNC1I1 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, ICC, E**
Primary Accession	O14576
Reactivity	**Rat, Pig, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**71 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human DYNC1I1**
Epitope Specificity	**1-100/645**
Isotype	**IgG**
Purity affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Cytoplasm, cytoskeleton, cilium axoneme.**
SIMILARITY	**Belongs to the dynein intermediate chain family. Contains 5 WD repeats.**
SUBUNIT	**Consists of at least two heavy chains and a number of intermediate and light chains.**
DISEASE	**Defects in DNAI1 are the cause of primary ciliary dyskinesia type 1 (CILD1) [MIM:244400]. CILD1 is an autosomal recessive disorder characterized by axonemal abnormalities of motile cilia. Respiratory infections leading to chronic inflammation and bronchiectasis are recurrent, due to defects in the respiratory cilia; reduced fertility is often observed in male patients due to abnormalities of sperm tails. Half of the patients exhibit situs inversus, due to dysfunction of monocilia at the embryonic node and randomization of left-right body asymmetry. Primary ciliary dyskinesia associated with situs inversus is referred to as Kartagener syndrome. Defects in DNAI1 are the cause of Kartagener syndrome (KTGS) [MIM:244400]. KTGS is an autosomal recessive disorder characterized by the association of primary ciliary dyskinesia with situs inversus. Clinical features include recurrent respiratory infections, bronchiectasis,**

infertility, and lateral transposition of the viscera of the thorax and abdomen. The situs inversus is most often total, although it can be partial in some cases (isolated dextrocardia or isolated transposition of abdominal viscera).

Important Note

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions
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].

DYNC1I1 Polyclonal Antibody - Additional Information

Gene ID 1780

Other Names
Cytoplasmic dynein 1 intermediate chain 1, Cytoplasmic dynein intermediate chain 1, Dynein intermediate chain 1, cytosolic, DH IC-1, DYNC1I1, DNCI1, DNCIC1

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. 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 ℃.

DYNC1I1 Polyclonal Antibody - Protein Information

Name DYNC1I1

Synonyms DNCI1, DNCIC1

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) DCTN1. May play a role in mediating the interaction of cytoplasmic dynein with membranous organelles and kinetochores.

Cellular Location
Cytoplasm. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, spindle pole

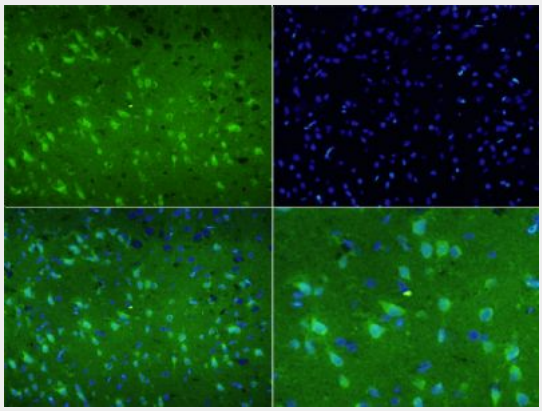
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DYNC1I1 Polyclonal Antibody - Protocols

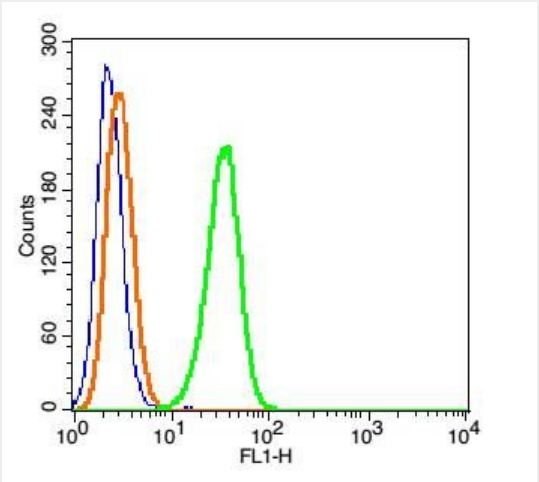
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DYNC1I1 Polyclonal Antibody - Images



Tissue/cell: rat brain tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-DYNC1I1 Polyclonal Antibody, FITC conjugated(bs-10470R-FITC) 1:200, 60 minutes at 37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



Blank control(blue): Hela(fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice).
Primary Antibody: Rabbit Anti- DYNC1I1/FITC Conjugated antibody (bs-10470R /FITC), Dilution: 1

µg in 100 µL 1X PBS containing 0.5% BSA;
Isotype Control Antibody: Rabbit IgG/FITC(orange) ,used under the same conditions.