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BICD2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7761b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q8TD16
Reactivity	Human
Predicted	Mouse, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15418
Calculated MW	93533
Antigen Region	787-818

Additional Information

Gene ID	23299
Other Names	Protein bicaudal D homolog 2, Bic-D 2, BICD2, KIAA0699
Target/Specificity	This BICD2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 787-818 amino acids from the C-terminal region of human BICD2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	BICD2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BICD2 (HGNC:17208)
Synonyms	KIAA0699
Function	Acts as an adapter protein linking the dynein motor complex to various cargos and converts dynein from a non-processive to a highly processive

motor in the presence of dynactin. Facilitates and stabilizes the interaction between dynein and dynactin and activates dynein processivity (the ability to move along a microtubule for a long distance without falling off the track) (PubMed:25814576). Facilitates the binding of RAB6A to the Golgi by stabilizing its GTP-bound form. Regulates coat complex coatomer protein I (COPI)-independent Golgi- endoplasmic reticulum transport via its interaction with RAB6A and recruitment of the dynein-dynactin motor complex (PubMed:25962623). Contributes to nuclear and centrosomal positioning prior to mitotic entry through regulation of both dynein and kinesin-1. During G2 phase of the cell cycle, associates with RANBP2 at the nuclear pores and recruits dynein and dynactin to the nuclear envelope to ensure proper positioning of the nucleus relative to centrosomes prior to the onset of mitosis (By similarity).

Cellular Location

Golgi apparatus. Cytoplasm, cytoskeleton. Cytoplasm. Nucleus envelope. Nucleus, nuclear pore complex. Note=In interphase cells mainly localizes to the Golgi complex and colocalizes with dynactin at microtubule plus ends (By similarity). Localizes to the nuclear envelope and cytoplasmic stacks of nuclear pore complex known as annulate lamellae in a RANBP2-dependent manner during G2 phase of the cell cycle (PubMed:20386726). {ECO:0000250|UniProtKB:Q921C5, ECO:0000269|PubMed:11864968, ECO:0000269|PubMed:20386726}

Tissue Location

Ubiquitous.

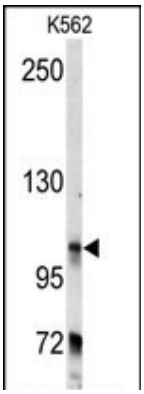
Background

BICD2 is one of two human homologs of Drosophila bicaudal-D and a member of the Bicoid family. It has been implicated in dynein-mediated, minus end-directed motility along microtubules. It has also been reported to be a phosphorylation target of NIMA related kinase 8.

References

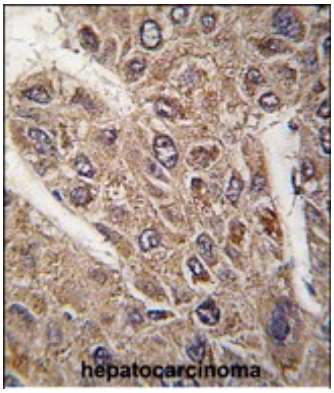
Olsen,J.V., Cell 127 (3), 635-648 (2006)

Images



Western blot analysis of anti-BICD2 Antibody (C-term) (Cat.#AP7761b) in K562 cell line lysates (35ug/lane). BICD2(arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with BICD2 antibody (C-term) (Cat.#AP7761b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical



relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.