

BICD2 Antibody (C-term) Blocking Peptide Synthetic peptide

Catalog # BP7761b

Specification

BICD2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>Q8TD16</u>

BICD2 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 23299

Other Names Protein bicaudal D homolog 2, Bic-D 2, BICD2, KIAA0699

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP7761b was selected from the C-term region of human BICD2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

BICD2 Antibody (C-term) Blocking Peptide - Protein Information

Name BICD2 (<u>HGNC:17208</u>)

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.

BICD2 Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

BICD2 Antibody (C-term) Blocking Peptide - Images

BICD2 Antibody (C-term) Blocking Peptide - 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.

BICD2 Antibody (C-term) Blocking Peptide - References

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