

KIF2C Antibody (N-term) Blocking peptide

Synthetic peptide Catalog # BP14043a

Specification

KIF2C Antibody (N-term) Blocking peptide - Product Information

Primary Accession <u>Q99661</u>

KIF2C Antibody (N-term) Blocking peptide - Additional Information

Gene ID 11004

Other Names

Kinesin-like protein KIF2C, Kinesin-like protein 6, Mitotic centromere-associated kinesin, MCAK, KIF2C, KNSL6

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP14043a was selected from the N-term region of KIF2C. 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.

KIF2C Antibody (N-term) Blocking peptide - Protein Information

Name KIF2C

Synonyms KNSL6

KIF2C Antibody (N-term) Blocking peptide - Background

The protein encoded by this gene is a member ofkinesin-like protein family. Proteins of this family aremicrotubule-dependent molecular motors that transport organelleswithin cells and move chromosomes during cell division. Thisprotein is important for anaphase chromosome segregation and may berequired to coordinate the onset of sister centromere separation.

KIF2C Antibody (N-term) Blocking peptide - References

Tanno, Y., et al. Genes Dev. 24(19):2169-2179(2010)Gnjatic, S., et al. Int. J. Cancer 127(2):381-393(2010)Sanhaji, M., et al. Mol. Cell. Biol. 30(11):2594-2607(2010)Olson, J.E., et al. Breast Cancer Res. Treat. (2010) In press:Kollu, S., et al. Curr. Biol. 19(24):2108-2113(2009)



Function

In complex with KIF18B, constitutes the major microtubule plus-end depolymerizing activity in mitotic cells (PubMed:21820309). Regulates the turnover of microtubules at the kinetochore and functions in chromosome segregation during mitosis (PubMed:19060894). Plays a role in chromosome congression and is required for the lateral to end- on conversion of the chromosome-microtubule attachment (PubMed: 23891108).

Cellular Location

Cytoplasm, cytoskeleton. Nucleus {ECO:0000250|UniProtKB:P70096} Chromosome, centromere. Chromosome, centromere, kinetochore. Note=Associates with the microtubule network at the growing distal tip (the plus-end) of microtubules, probably through interaction with MTUS2/TIP150 and MAPRE1 (By similarity). Association with microtubule plus ends is also mediated by interaction with KIF18B. Centromeric localization requires the presence of BUB1 and SGO2. {ECO:0000250|UniProtKB:P70096, ECO:0000269|PubMed:17485487, ECO:0000269|PubMed:21820309}

Tissue Location

Expressed at high levels in thymus and testis, at low levels in small intestine, the mucosal lining of colon, and placenta, and at very low levels in spleen and ovary; expression is not detected in prostate, peripheral blood Leukocytes, heart, brain, lung, liver, skeletal muscle, kidney or pancreas. Isoform 2 is testis- specific.

KIF2C Antibody (N-term) Blocking peptide - Protocols

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

• Blocking Peptides