

CPTC-KIF2C-2 (CAB080091)

Uniprot ID: [Q99661](#)

Protein name: KIF2C_HUMAN

Full name: Kinesin-like protein KIF2C

Tissue specificity: 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.

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).

Subcellular location:

Cytoplasm > Cytoskeleton (*experimental evidence*)

Nucleus (*by similarity*)

Chromosome > Centromere (*experimental evidence*)

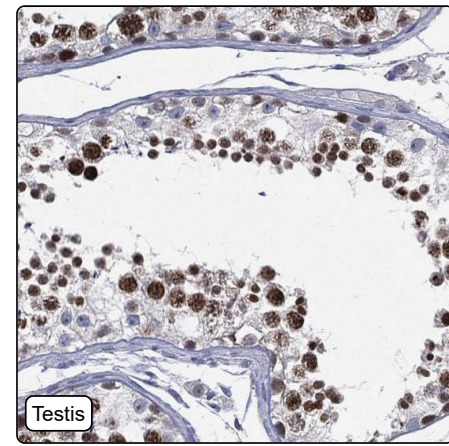
Chromosome > Centromere > Kinetochore (*experimental evidence*)

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.

Protein existence: Experimental evidence at protein level

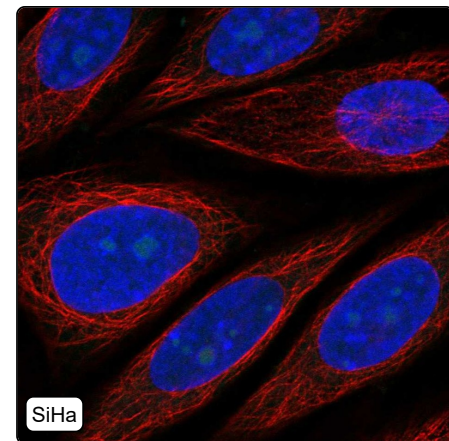
Comment:

Immunohistochemistry



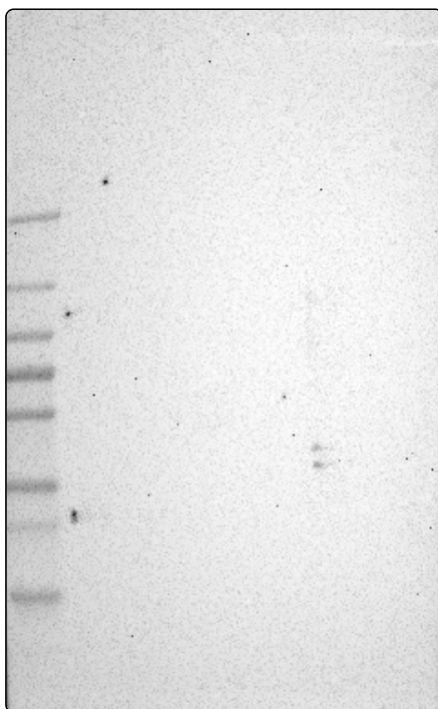
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|--------------------------|---|
| IHC protocol: | HIER pH6, Dilution 1:250 |
| IHC test staining: | Cytoplasmic and nuclear positivity in bone marrow, thymus and testis. |
| Literature conformance: | Consistent with extensive gene/protein characterization data |
| Literature significance: | |
| RNA similarity: | High consistency between antibody staining and RNA expression data |
| RNA tissue specificity: | Group enriched (bone marrow,lymphoid tissue,testis) |
| RNA tissue distribution: | Detected in many |
| IHC Sibling similarity: | Other antibody shows partly similar IHC staining pattern |

Immunofluorescence



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|-------------------------------------|--|
| IF Overlay: | antibody (green), anti-tubulin (red) and DAPI (blue) |
| IF main location: | |
| IF additional location: | |
| IF approved for publication on HPA: | No |
| IF in SiHa: | Negative |
| IF in SK-MEL-30: | Negative |
| IF in U-2 OS: | Negative |

Western blot



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|--------------------------------|--|
| WB Size markers (kDa): | 250, 130, 100, 70, 55, 35, 25, 15, 10 |
| WB Lanes: | Marker (1), RT4 (2), U-251 MG (3), Plasma (4), Liver (5), Tonsil (6) |
| WB Target weight (kDa): | 12, 32, 38, 76, 81 |
| WB Validation: | Uncertain (No bands detected.) |