

Anti-MCAK Picoband Antibody

Catalog # ABO11921

Product Information

Application	WB, IHC-P
Primary Accession	Q99661
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Kinesin-like protein KIF2C(KIF2C) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	11004
Other Names	Kinesin-like protein KIF2C, Kinesin-like protein 6, Mitotic centromere-associated kinesin, MCAK, KIF2C, KNSL6
Calculated MW	81313
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, Human, By Heat Western blot, 0.1-0.5 µg/ml, Human, Mouse
Subcellular Localization	Cytoplasm, cytoskeleton . Nucleus . Chromosome, centromere. Chromosome, centromere, kinetochore. 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 SGOL2. .
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. .
Source	Eukaryota
Protein Name	Kinesin-like protein KIF2C
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen	E.coli-derived human MCAK recombinant protein (Position: G531-Q725). Human MCAK shares 87% amino acid (aa) sequence identity with both mouse and rat MCAK.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the TRAFAC class myosin-kinesin ATPase superfamily. Kinesin family. MCAK/KIF2 subfamily.

Protein Information

Name	KIF2C
Synonyms	KNSL6
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.

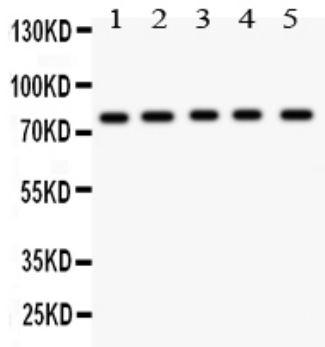
Background

Kinesin-like protein KIF2C is a protein that in humans is encoded by the KIF2C gene. It is mapped to 1p34.1. The protein encoded by this gene is a member of kinesin-like protein family. Most proteins of this family are microtubule-dependent molecular motors that transport organelles within cells and move chromosomes during cell division. This protein acts to regulate microtubule dynamics in cells and is important for anaphase chromosome segregation and may be required to coordinate the onset of sister centromere separation. KIF2C uses microtubule depolymerizing activity to correct improper microtubule attachments at kinetochores.

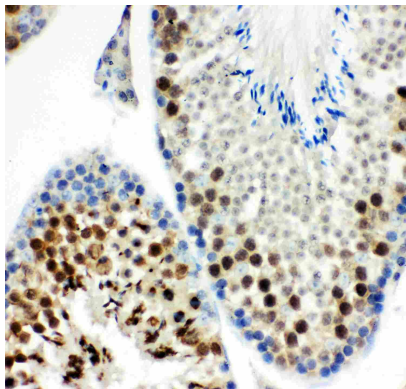
Images



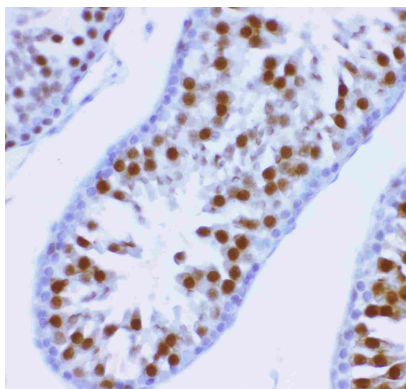
lanes: Anti MCAK (ABO11921) at 0.5ug/mlWB:
Recombinant Human MCAK Protein 0.5ngPredicted bind
size: 48KDObserved bind size: 48KD



Anti- MCAK antibody, ABO11921, Western blottingAll
lanes: Anti MCAK (ABO11921) at 0.5ug/mlLane 1: Mouse
Testis Tissue Lysate at 50ugLane 2: HELA Whole Cell
Lysate at 40ugLane 3: MM231 Whole Cell Lysate at
40ugLane 4: MM453 Whole Cell Lysate at 40ugLane 5:
SKOV Whole Cell Lysate at 40ugPredicted bind size:
81KDObserved bind size: 81KD

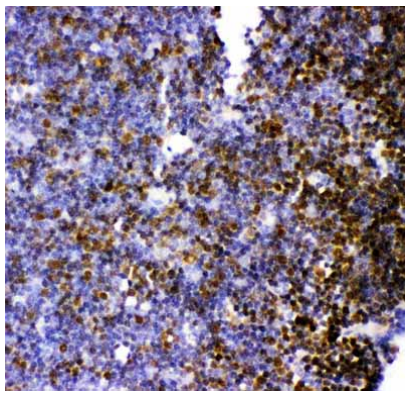


Anti- MCAK antibody, ABO11921, IHC(P)IHC(P): Mouse
Testis Tissue



Anti- MCAK antibody, ABO11921, IHC(P)IHC(P): Rat Testis
Tissue

Anti- MCAK antibody, ABO11921, IHC(P)IHC(P): Rat
Thymus Tissue



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