

## Rabbit Anti-MCAK/KIF2C/AF350 Conjugated antibody

SL18713R-AF350

<b>Product Name</b>	Anti-MCAK/KIF2C/AF350
<b>Chinese Name</b>	AF350 标记的有丝分裂着丝粒相关驱动蛋白抗体
<b>Alias</b>	4930402F02Rik; ESTM5; KIF 2C; kif2c; KIF2C_HUMAN; Kinesin Family Member 2C; Kinesin family member 2C; kinesin like 6 (mitotic centromere associated kinesin); Kinesin like 6; Kinesin like protein 6; Kinesin like protein KIF2C; Kinesin-like protein 6; Kinesin-like protein KIF2C; KNS L6; KNSL 6; KNSL6; MCAK; MGC11883; Mitotic centromere associated kinesin; Mitotic centromere-associated kinesin; OTTHUMP00000010066; X83316.
<b>Research Area</b>	Cell biology Signal transduction
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	(predicted:Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Sheep,Chinese Hamster)
<b>Applications</b>	ICC/IF=1:50-200,IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight</b>	81kDa
<b>Form</b>	Lyophilized or Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthetic peptide derived from human MCAK
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Storage Buffer</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol
<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>Product Detail</b>	<b>background:</b>

This gene encodes a kinesin-like protein that functions as a microtubule-dependent molecular motor. The encoded protein can depolymerize microtubules at the plus end, thereby promoting mitotic chromosome segregation. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]

**Function:**

Promotes ATP-dependent removal of tubulin dimers from microtubules. Regulates the turnover of microtubules at the kinetochore and functions in chromosome segregation during mitosis.

**Subunit:**

Interacts with CENPH. Interacts with MTUS2/TIP150; the interaction is direct. Interacts with MAPRE1; the interaction is direct, regulated by phosphorylation and is probably required for targeting to growing microtubule plus ends. Interacts with KIF18B at microtubule tips; this interaction increases the affinity of both partners for microtubule plus ends and is required for robust microtubule depolymerization. Phosphorylation by AURKA or AURKB strongly reduces KIF18B-binding.

**Subcellular Location:**

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). 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.

**Post-translational modifications:**

Phosphorylated upon DNA damage, probably by ATM or ATR. Phosphorylation by STK12, regulates association with centromeres and kinetochores and the microtubule depolymerization activity.

**Similarity:**

Belongs to the kinesin-like protein family. MCAK/KIF2 subfamily. Contains 1 kinesin-motor domain.

**Database links:**

[Entrez Gene: 11004](#) Human

[Entrez Gene: 73804](#) Mouse

[Entrez Gene: 171529](#) Rat

[Omim: 604538](#) Human

[SwissProt: Q99661](#) Human

[SwissProt: Q922S8](#) Mouse

[SwissProt: Q62909](#) Rat

[Unigene: 720061](#) Human

[Unigene: 247651](#) Mouse

[Unigene: 219966](#) Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.