

Rabbit Anti-phospho-KIF20A (Ser528) antibody

SL17045R

Product Name:	phospho-KIF20A (Ser528)
Chinese Name:	磷酸化有丝分裂 驱动 蛋白 样2 抗体
Alias:	KIF20A (phospho S528); p-KIF20A (phospho S528); GG10 2; GG10_2; Kif20a; kinesin family member 20A; Kinesin like protein KIF20A; Kinesin-like protein 174; mitotic kinesin like protein 2; MKLP2; RAB6 interacting, kinesin like (rabkinesin6); Rab6-interacting kinesin-like protein; RAB6-INTERACTING PROTEIN, KINESIN-LIKE; RAB6KIFL; Rabkinesin 6; AA415432; FLJ21151.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	100kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human KIF20A around the phosphorylation site of Ser528:EH(p-S)LQ
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The kinesins constitute a large family of microtubule-dependent motor proteins, which

are responsible for the distribution of numerous organelles, vesicles and macromolecular complexes throughout the cell (1-3). Individual kinesin members play crucial roles in cell division, intracellular transport, and membrane trafficking events including endocytosis and transcytosis (3,4). KIF1C is a member of the KIF1/Unc104 family of kinesin-like proteins, which are involved in the transport of mitochondria or synaptic vesicles in axons (5). Human KIF1C maps to chromosome 17p13 and encodes a predicted 1,103 amino acid protein with abundant expression in heart and skeletal muscle (5). Tyrosine phosphorylation is a putative regulator of KIF1C mediated retrograde transport of Golgi vesicles to the endoplasmic reticulum (5). KIF1C is capable of forming homodimers and can noncovalently associate with 14-3-3 beta, gamma, epsilon and zeta (6). In mouse macrophages, KIF1C is required for anthrax lethal toxin resistance (7).

Function:

Mitotic kinesin required for chromosome passenger complex (CPC)-mediated cytokinesis. Following phosphorylation by PLK1, involved in recruitment of PLK1 to the central spindle. Interacts with guanosine triphosphate (GTP)-bound forms of RAB6A and RAB6B. May act as a motor required for the retrograde RAB6 regulated transport of Golgi membranes and associated vesicles along microtubules. Has a microtubule plus end-directed motility.

Subcellular Location:

Golgi apparatus. Cytoplasm > cytoskeleton > spindle.

Post-translational modifications:

Phosphorylated by PLK1 at Ser-528 during mitosis, creating a docking site for PLK1 and recruiting PLK1 at central spindle.

Similarity:

Belongs to the kinesin-like protein family.

Contains 1 kinesin-motor domain.

SWISS:

095235

Gene ID:

10112

Database links:

Entrez Gene: 10112 Human

Entrez Gene: 19348 Mouse

Omim: 605664 Human

SwissProt: O95235 Human

SwissProt: P97329 Mouse

Unigene: 718626 Human

Unigene: 258846 Mouse

Important Note:

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