

KIF4A Recombinant Rabbit mAb

Catalog # AP100033

Product Information

Application	WB
Primary Accession	O95239
Other Accession	O95239
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	139881
Physical State	Liquid
Immunogen	A synthesized peptide derived from human Chromokinesin A
Epitope Specificity	40-70/1232
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	10mM phosphate buffered saline(pH 7.4) with 150mM sodium chloride, 0.05% BSA, 0.02% Proclin300 and 50% glycerol.
SIMILARITY	Belongs to the kinesin-like protein family. Chromokinesin subfamily. Contains 1 kinesin-motor domain.
SUBUNIT	Interacts with unphosphorylated PRC1 during late mitosis.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Iron-sulfur (Fe-S) cluster binding motor protein that has a role in chromosome segregation during mitosis. Translocates PRC1 to the plus ends of interdigitating spindle microtubules during the metaphase to anaphase transition, an essential step for the formation of an organized central spindle midzone and midbody and for successful cytokinesis.

Additional Information

Gene ID	24137
Other Names	KIF4; KIF4G1; MRX100; TMDI; XLID100; D330050K22Rik; Kns4; KIF4A_HUMAN; KIF4A; Chromokinesin-A; KIF4_MOUSE; Chromokinesin; kinesin family member 4A; chromokinesin KIF4A
Dilution	WB=1:500-2000,Flow-Cyt=1:50-100,ICC/IF=1:50-200
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	KIF4A
Synonyms	KIF4
Function	Iron-sulfur (Fe-S) cluster binding motor protein that has a role in chromosome segregation during mitosis (PubMed: 29848660). Translocates PRC1 to the plus ends of interdigitating spindle microtubules during the metaphase to anaphase transition, an essential step for the formation of an organized central spindle midzone and midbody and for successful cytokinesis (PubMed: 15297875 , PubMed: 15625105). May play a role in mitotic chromosomal positioning and bipolar spindle stabilization (By similarity).
Cellular Location	Nucleus matrix. Cytoplasm. Cytoplasm, cytoskeleton, spindle Midbody Chromosome. Note=Associates with chromosomes at all stage of mitosis (PubMed:11736643, PubMed:15297875, PubMed:15625105) Chromatin localization is dependent on iron-sulfur cluster binding (PubMed:29848660). In anaphase, associates with the mitotic spindle midzone (PubMed:15297875). In telophase and cytokinesis, co-localizes with CIAO2B at the spindle midzone and midbody (PubMed:15297875, PubMed:29848660). Co-localizes with PRC1 in early mitosis and at the spindle midzone from anaphase B to telophase (PubMed:15297875, PubMed:15625105). Does not localize to the nucleolus (PubMed:11736643)
Tissue Location	Highly expressed in hematopoietic tissues, fetal liver, spleen, thymus and adult thymus and bone marrow. Lower levels are found in heart, testis, kidney, colon and lung

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.