

KIF4A Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50702

Product Information

Application WB
Primary Accession O95239
Reactivity Human
Host Rabbit
Clonality polyclonal
Calculated MW 139881

Additional Information

Gene ID 24137

Other Names Chromosome-associated kinesin KIF4A, Chromokinesin-A, KIF4A, KIF4

Dilution WB~~1:1000

Format Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4,

150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions -20°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: <u>29848660</u>). 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:<u>15297875</u>, PubMed:<u>15625105</u>). 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

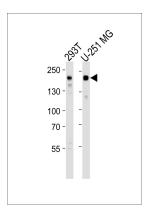
Background

Motor protein that 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. May play a role in mitotic chromosomal positioning and bipolar spindle stabilization.

References

Villard L., et al. Submitted (AUG-1999) to the EMBL/GenBank/DDBJ databases. Oh S.J., et al. Biochim. Biophys. Acta 1493:219-224(2000). Rentsch A., et al. Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases. Ota T., et al. Nat. Genet. 36:40-45(2004). Ross M.T., et al. Nature 434:325-337(2005).

Images



Western blot analysis of lysates from 293T,U-251 MG cell line (from left to right), using KIF4A Antibody(AP50702). AP50702 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

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