

Anti-KIF4A Antibody

Rabbit polyclonal antibody to KIF4A Catalog # AP59823

Specification

Anti-KIF4A Antibody - Product Information

Application WB, IF/IC
Primary Accession O95239
Reactivity Human, Mouse, Monkey
Host Rabbit

Clonality Polyclonal Calculated MW 139881

Anti-KIF4A Antibody - Additional Information

Gene ID 24137

Other Names

KIF4; Chromosome-associated kinesin KIF4A; Chromokinesin-A

Target/Specificity

Recognizes endogenous levels of KIF4A protein.

Dilution

WB~~WB (1/500 - 1/1000), IF/IC (1/100 - 1/500) IF/IC~~N/A

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-KIF4A Antibody - 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

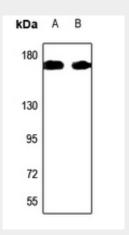
Highly expressed in hematopoietic tissues, fetal liver, spleen, thymus and adult thymus and bone marrow. Lower levels are found in heart, testis, kidney, colon and lung

Anti-KIF4A Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

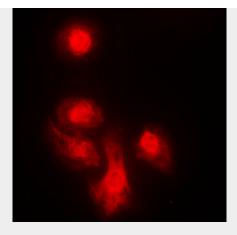
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-KIF4A Antibody - Images



Western blot analysis of KIF4A expression in Hela (A), HGC27 (B) whole cell lysates.





Immunofluorescent analysis of KIF4A staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 $^{\circ}$ C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Anti-KIF4A Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human KIF4A. The exact sequence is proprietary.