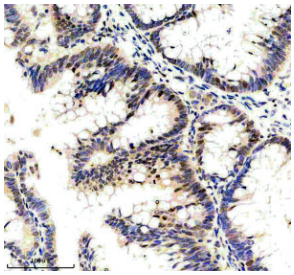
KIF4A Antibody 24K13 / Mitotic Kinesin Marker [clone 24K13] (FY13507)

Catalog No.	Formulation	Size
FY13507	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol	100 ul

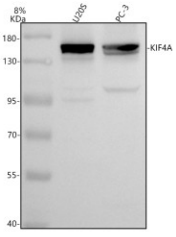
Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human, Mouse
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	24K13
Purity	Antigen chromatography
UniProt	O95239
Applications	Western blot: 1:500 Immunohistochemistry (FFPE): 1:50
Limitations	This KIF4A Antibody 24K13 / Mitotic Kinesin Marker is available for research use only.



KIF4A Antibody 24K13 in Human Colon Cancer IHC. Immunohistochemistry staining of FFPE human colon cancer tissue with KIF4A Antibody 24K13 / Mitotic Kinesin Marker, clone 24K13, at 1:50 overnight at 4oC. HIER was performed using EDTA buffer, pH 8.0, followed by blocking with 10% goat serum. HRP/DAB detection demonstrates KIF4A staining in human colon cancer tissue.



KIF4A Antibody 24K13 in Human Osteosarcoma and Prostate Cancer Cells WB. Western blot testing of human U2OS osteosarcoma and PC-3 prostate cancer cell lysates with KIF4A Antibody 24K13 / Mitotic Kinesin Marker, clone 24K13, at 1:500 overnight at 4oC. Lane 1: U2OS whole cell lysate. Lane 2: PC-3 whole cell lysate. A specific band is observed at approximately 150 kDa; the predicted molecular weight of KIF4A is approximately 140 kDa.

Description

KIF4A Antibody 24K13 / Mitotic Kinesin Marker detects kinesin family member 4A (KIF4A), a microtubule-based motor protein with important functions in chromosome organization, mitosis and cytokinesis. KIF4A belongs to the kinesin-4 family and functions as a chromokinesin, associating with chromosomes and microtubule structures during cell division. Through its motor and microtubule-regulating activities, KIF4A helps coordinate chromosome architecture with the dynamic organization of the mitotic spindle.

KIF4A participates in multiple stages of the cell cycle. During mitosis, it associates with chromosome arms and contributes to chromosome condensation, positioning and segregation. The protein also regulates microtubule dynamics and helps control spindle organization. As cells progress toward anaphase and cytokinesis, KIF4A redistributes to the central spindle and midzone, where it contributes to organization of antiparallel microtubules and formation of structures required for successful cell division.

An important aspect of KIF4A function is its interaction with proteins that regulate chromosome structure and the mitotic apparatus. KIF4A cooperates with chromosome-associated complexes to control chromosome morphology and also contributes to spatial regulation of microtubule growth within the spindle midzone. These activities connect chromosome organization, spindle mechanics and cytokinesis, making KIF4A a useful mitotic kinesin marker for research into the molecular mechanisms governing cell division.

KIF4A is also studied in cancer biology because accurate control of chromosome segregation and cytokinesis is essential for maintaining genomic stability. Altered KIF4A expression has been reported in multiple tumor types and has been investigated in relation to cell proliferation, tumor progression and patient outcome. Depending on cellular context, changes in KIF4A activity may influence mitotic progression, chromosome stability and signaling pathways associated with malignant growth.

Clone 24K13 is a rabbit monoclonal antibody generated against a synthetic peptide derived from human KIF4A. It has been evaluated for detection of KIF4A protein in research applications. NSJ Bioreagents supplies antibodies for cell division, cytoskeletal and cancer research. A KIF4A Antibody can be used to investigate chromosome organization, mitotic spindle regulation, cytokinesis, cell proliferation and disease-associated changes in KIF4A expression.

For additional antibodies targeting proteins involved in cell proliferation, regulatory signaling and cancer-associated pathways, explore our Signal Transduction Antibodies page.

Application Notes

Optimal dilution of the KIF4A Antibody 24K13 / Mitotic Kinesin Marker should be determined by the researcher.

Immunogen

A synthesized peptide derived from human kinesin family member 4A was used as the immunogen for the KIF4A Antibody 24K13.

Storage

Store the KIF4A Antibody 24K13 at -20oC for one year, or at 4oC for one month.

Alternate Names

KIF4A antibody, Mitotic Kinesin Marker antibody, Kinesin Family Member 4A antibody, Kinesin-4 antibody, Chromokinesin KIF4A antibody

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