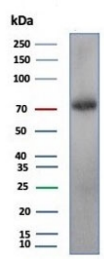
KIF2C Antibody for WB / Western Blot Antibody [clone KIF2C/4704] (V4675)

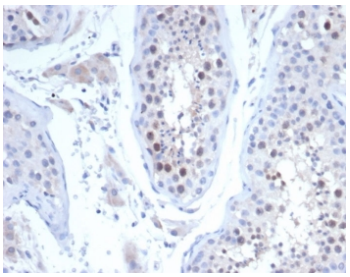
Catalog No.	Formulation	Size
V4675-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4675-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4675SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

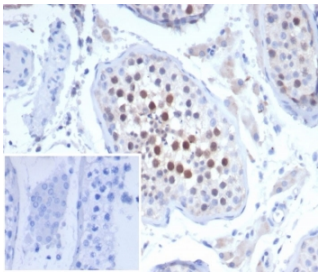
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	KIF2C/4704
Purity	Protein A/G affinity
UniProt	Q99661
Localization	Cytoplasm, Nucleus
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This KIF2C Antibody for WB / Western Blot Antibody is available for research use only.



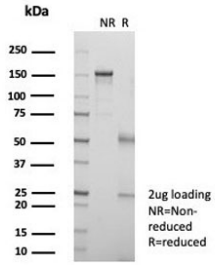
KIF2C Antibody for WB Human Testis. Western blot analysis of Kinesin like protein 6 / KIF2C expression in human testis tissue lysate using KIF2C Antibody for WB, mouse monoclonal clone KIF2C/4704 at 2 ug/ml. A band is detected at approximately 70-80 kDa, consistent with the predicted molecular weight of KIF2C, supporting detection of the full-length protein in tissue lysates. This Western Blot Antibody enables reliable detection of KIF2C in proliferative tissue samples.



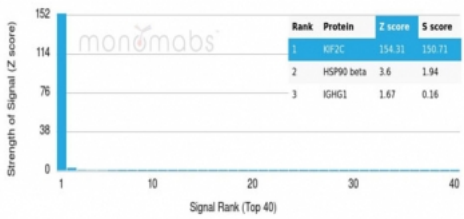
KIF2C Antibody Testis IHC. Immunohistochemistry staining of FFPE human testis tissue with Kinesin like protein 6 / KIF2C antibody (clone KIF2C/4704) at 2ug/ml. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



KIF2C Antibody Human Testis Tissue IHC. Immunohistochemistry staining of FFPE human testis tissue with Kinesin like protein 6 / KIF2C antibody (clone KIF2C/4704) at 2ug/ml. Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free Kinesin like protein 6 / KIF2C antibody (clone KIF2C/4704) as confirmation of integrity and purity.



KIF2C Antibody Microarray Specificity Validation. Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using Kinesin like protein 6 / KIF2C antibody (clone KIF2C/4704). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a mAb to its intended target. A mAb is considered to specific to its intended target, if the mAb has an S-score of at least 2.5. For example, if a mAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that mAb to protein X is equal to 29.

Description

Kinesin like protein 6 (KIF2C) is a microtubule-associated motor protein that plays a central role in mitotic spindle dynamics and accurate chromosome segregation during cell division. This mouse monoclonal KIF2C Antibody for WB / Western Blot Antibody (clone KIF2C/4704) enables detection of KIF2C in lysate-based assays, supporting analysis of protein expression and mitotic regulation in proliferating cells. KIF2C is also widely referred to as mitotic centromere associated kinesin (MCAK) in the literature, reflecting its localization to centromeres and kinetochores during mitosis.

KIF2C antibody, also referred to as kinesin like protein 6 antibody or MCAK antibody, recognizes a member of the kinesin-13 family of microtubule depolymerizing enzymes, which regulate microtubule turnover rather than directional transport. KIF2C localizes dynamically to centrosomes, kinetochores, and spindle microtubules, where it promotes microtubule depolymerization and ensures proper chromosome alignment and segregation. Its activity is tightly regulated throughout the cell cycle, with peak expression during mitosis, making it a key determinant of spindle integrity and genomic stability.

Western blot analysis using this antibody demonstrates detection of KIF2C in cell lysates, where a band is observed consistent with the expected molecular weight of the full-length protein. Immunoblotting is particularly well suited for KIF2C because it enables evaluation of expression across different cell cycle stages and experimental conditions, as well as detection of post-translational modifications that influence microtubule depolymerizing activity. This supports detailed analysis of mitotic regulation and checkpoint signaling.

Additional support for specificity is provided by protein microarray analysis demonstrating selective binding of clone KIF2C/4704 to KIF2C among a large panel of human proteins. This microarray specificity data reinforces confidence in target recognition in complex lysate samples and supports reliable interpretation of western blot results. The combination of microarray-validated specificity and strong immunoblot performance provides a robust foundation for studies requiring accurate detection of KIF2C expression.

KIF2C plays an essential role in maintaining genomic stability, and dysregulation of its expression or activity has been associated with chromosomal instability and tumor progression in multiple cancers. Elevated KIF2C expression is frequently observed in proliferative tissues and malignancies, reflecting its role in mitotic control. In addition to its function in chromosome segregation, KIF2C interacts with regulatory proteins involved in spindle checkpoint signaling and microtubule dynamics.

Given its critical role in mitosis and its association with cancer biology, KIF2C represents an important target for studies of cell cycle regulation and therapeutic response. A KIF2C antibody for western blot can be used to evaluate protein expression, monitor mitotic activity, and support investigations into microtubule dynamics, spindle assembly, and disease-related alterations in proliferating cells.

This antibody is part of a broader antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the KIF2C Antibody for WB / Western Blot Antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 500-700) from the human protein was used as the immunogen for the Kinesin like protein 6 / KIF2C antibody.

Storage

Aliquot the Kinesin like protein 6 / KIF2C antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Kinesin like protein 6 antibody, Mitotic centromere associated kinesin antibody, MCAK antibody, KIF2C western blot antibody, KIF2C protein antibody

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