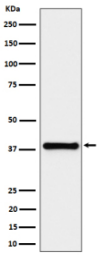
HAUS7 Antibody / UCHL5IP [clone 30H38] (FY12335)

Catalog No.	Formulation	Size
FY12335	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30H38
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q99871
Applications	Western blot: 1:500-1:2000
Limitations	This HAUS7 antibody is available for research use only.



Western blot analysis of UCHL5IP/HAUS7 expression in HeLa cell lysate using HAUS7 antibody. Predicted molecular weight ~40 kDa.

Description

HAUS7 antibody recognizes human augmin complex subunit 7, a protein that functions as part of the eight member augmin complex. This complex is essential for the organization of spindle microtubules during mitosis. HAUS7, together with its partner subunits, recruits the gamma tubulin ring complex to existing spindle microtubules, promoting the

nucleation of new microtubules within the mitotic spindle. This activity ensures the formation of a robust and organized spindle structure that is required for accurate chromosome segregation and genomic stability.

Research has shown that HAUS7 plays a central role in centrosome independent microtubule generation. Cells that lack HAUS7 exhibit reduced spindle microtubule density, misaligned chromosomes, and higher rates of aneuploidy. Because of these essential functions, HAUS7 has become a focus in both cell biology and cancer research. Detecting HAUS7 with a specific antibody allows scientists to examine how the augmin complex contributes to mitotic regulation and how its disruption may drive disease progression.

HAUS7 antibody has broad utility in western blotting, immunohistochemistry, immunofluorescence, and flow cytometry. In western blot assays, the antibody identifies HAUS7 protein bands with high specificity, enabling precise measurement of protein expression. In immunohistochemistry, HAUS7 antibody reveals spindle associated localization patterns in dividing cells. Immunofluorescence experiments provide detailed visualization of HAUS7 during mitosis, often showing colocalization with other augmin subunits and spindle proteins. These applications make HAUS7 antibody a versatile reagent for a wide range of experimental systems.

In oncology, HAUS7 is of great interest because chromosome instability is a hallmark of cancer. Tumor cells often display abnormal spindle assembly and missegregation of chromosomes, and HAUS7 is directly involved in these processes. Abnormal expression of HAUS7 may therefore contribute to tumor growth and poor clinical outcomes. With HAUS7 antibody, researchers can compare expression levels between normal and malignant tissues, providing valuable information about its role in cancer biology.

Beyond oncology, HAUS7 is also relevant in developmental biology. Spindle regulation is essential for embryonic growth and tissue patterning. Errors in spindle assembly can produce developmental defects that persist throughout life. HAUS7 antibody is a useful reagent for developmental models, enabling researchers to map protein expression during early embryogenesis and tissue formation.

Stem cell biology represents another area where HAUS7 antibody is valuable. Asymmetric cell division is critical for determining stem cell fate, and accurate spindle orientation is central to this process. By employing HAUS7 antibody in stem cell models, investigators can explore how spindle regulation influences lineage commitment and tissue renewal. This knowledge can inform strategies for regenerative medicine and tissue engineering.

Technical advantages of HAUS7 antibody include its ability to perform consistently across multiple platforms. In microscopy, it highlights spindle microtubules with clear resolution, making it an excellent tool for visualizing mitosis. In biochemical assays, it can be combined with antibodies against other augmin subunits or gamma tubulin to study protein protein interactions. Such versatility extends the utility of HAUS7 antibody beyond simple detection to mechanistic dissection of cellular pathways.

From a translational perspective, HAUS7 antibody supports drug discovery aimed at mitotic control. Many chemotherapeutic drugs target microtubule dynamics, and understanding the role of augmin complex proteins may lead to new therapeutic approaches. By using HAUS7 antibody to track protein expression in treated cells, researchers can evaluate how different drugs affect spindle assembly and cell survival. These insights can guide the development of more selective treatments that exploit mitotic vulnerabilities in cancer cells.

NSJ Bioreagents provides HAUS7 antibody to support researchers investigating mitotic regulation, spindle dynamics, and chromosome segregation. Its proven specificity and performance across assay formats make it a dependable choice for laboratories working in cancer biology, cell division, and developmental research.

Application Notes

Optimal dilution of the HAUS7 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human UCHL5IP was used as the immunogen for the HAUS7 antibody.

Storage

Store the HAUS7 antibody at -20oC.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com
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