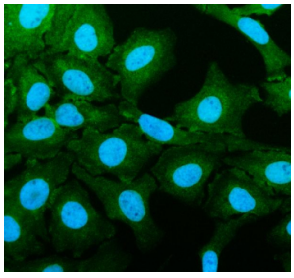
HAUS8 Antibody / HAUS augmin-like complex subunit 8 (FY12575)

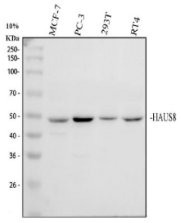
Catalog No.	Formulation	Size
FY12575	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

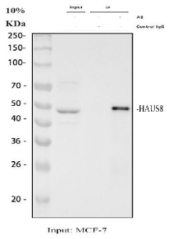
Availability	1-2 days
Species Reactivity	Human
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q9BT25
Localization	Cytoplasm
Applications	Western Blot: 0.25-0.5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This HAUS8 antibody is available for research use only.



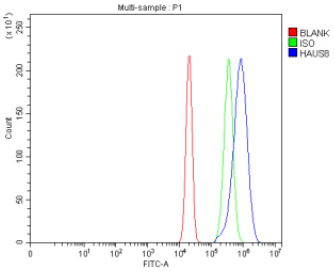
Immunofluorescent staining of FFPE human HeLa cells with HAUS8 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot analysis of HAUS8 using anti-HAUS8 antibody. Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human MCF-7 whole cell lysates, Lane 2: human PC-3 whole cell lysates, Lane 3: human 293T whole cell lysates, Lane 4: human RT4 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-HAUS8 antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using an ECL Plus Western Blotting Substrate. A specific band was detected for HAUS8 at approximately 45 kDa. The expected molecular weight of HAUS8 is ~45 kDa.



Immunoprecipitation of HAUS8 protein from 500ug of human MCF7 whole cell lysate with 2ug of HAUS8 antibody.



Flow Cytometry analysis of MCF-7 cells using anti-HAUS8 antibody. Overlay histogram showing MCF-7 cells stained with (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-HAUS8 antibody (1 ug/million cells) for 30 min at 20oC. DyLight 488 conjugated goat anti-rabbit IgG (5-10 ug/million cells) was used as secondary antibody for 30 minutes at 20oC. Isotype control antibody (Green line) was rabbit IgG (1 ug/million cells) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Description

HAUS8 antibody detects HAUS augmin-like complex subunit 8, a component of the augmin complex that nucleates and stabilizes microtubules during mitotic spindle formation. The augmin complex enhances microtubule generation within the spindle independently of centrosomes, ensuring robust chromosome segregation and cell division fidelity. The HAUS8 antibody is widely used in cell cycle and cytoskeletal research to study spindle dynamics, mitotic organization, and microtubule nucleation.

HAUS8 is encoded by the HAUS8 gene located on human chromosome 19q13.32. The protein is approximately 42 kilodaltons and localizes to spindle microtubules during mitosis. HAUS8 interacts with other augmin subunits (HAUS1-7) and the gamma-tubulin ring complex, facilitating branching microtubule nucleation within the spindle. This activity is crucial for maintaining spindle symmetry and attachment of kinetochores to microtubules during metaphase.

The HAUS8 antibody detects a 42 kilodalton band by western blot and shows distinct spindle staining by immunofluorescence. Depletion of HAUS8 disrupts spindle microtubule amplification, resulting in defective chromosome alignment and prolonged mitosis. Cells lacking HAUS8 exhibit reduced kinetochore tension and increased aneuploidy, underscoring its importance in maintaining genomic stability.

HAUS8 also functions in interphase cells, where it contributes to microtubule organization and centrosome positioning. Dysregulation of HAUS8 has been observed in cancers with chromosomal instability, suggesting that aberrant spindle nucleation may drive tumor progression. Because augmin complex activity is essential for spindle integrity, HAUS8 serves as a critical factor linking microtubule dynamics with mitotic checkpoint control.

Through its role in spindle formation and genome maintenance, HAUS8 represents a key target for studies of cell division, cancer biology, and microtubule regulation. NSJ Bioreagents provides a validated HAUS8 antibody optimized for its applications, supporting research into spindle assembly, centrosome biology, and chromosomal stability.

Application Notes

Optimal dilution of the HAUS8 antibody should be determined by the researcher.

Immunogen

E.coli-derived human HAUS8 recombinant protein (Position: D86-A322) was used as the immunogen for the HAUS8 antibody.

Storage

After reconstitution, the HAUS8 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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