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
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
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.

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 western blot, immunofluorescence, and confocal imaging, 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.