

SASS6 Antibody / Spindle assembly abnormal protein 6 (FY12690)

Catalog No.	Formulation	Size
FY12690	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, Mouse, Rat
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	Q6UVJ0
Applications	ELISA: 0.1-0.5ug/ml Immunofluorescence: 5ug/ml Immunohistochemistry: 2-5ug/ml Western Blot: 0.25-0.5ug/ml Flow Cytometry: 1-3ug/million cells
Limitations	This SASS6 antibody is available for research use only.

Description

SASS6 antibody recognizes Spindle assembly abnormal protein 6 homolog, a centriolar protein required for centriole duplication and proper cell division. Encoded by the SASS6 gene on chromosome 1p21.2, this protein is a structural component of the cartwheel, a ninefold symmetric scaffold that initiates centriole assembly. SASS6 self-oligomerizes through its coiled-coil domain to establish the radial symmetry of nascent centrioles, ensuring accurate duplication and inheritance of centrosomes during each cell cycle. The protein localizes to the proximal ends of centrioles and is essential for maintaining centrosome integrity and mitotic spindle organization.

Loss of SASS6 disrupts centriole formation, resulting in monopolar spindles and abnormal cell division. Mutations in SASS6 cause primary microcephaly, characterized by reduced brain size and defective neural progenitor proliferation. The SASS6 antibody allows detection of centriolar structures in cultured cells and tissue samples. Immunofluorescence using this antibody reveals punctate staining at centrosomes during interphase and mitosis, while western blotting identifies a 65 kilodalton band. Because of its critical role in centrosome biogenesis, SASS6 serves as a core marker for centriole assembly studies and cell cycle regulation research.

Beyond its role in structural assembly, SASS6 interacts with STIL and CEP135 to coordinate recruitment of microtubule-nucleating proteins. Its regulated degradation through the APC/C complex ensures centriole duplication occurs only once per cell cycle. Overexpression of SASS6 leads to centrosome amplification, a phenotype frequently observed in cancer cells. The SASS6 antibody is thus valuable for examining centrosome abnormalities and chromosomal instability associated with tumorigenesis. Researchers also employ this antibody in developmental studies to trace centriole formation during early embryogenesis. NSJ Bioreagents provides a validated SASS6 antibody for use in immunofluorescence, western blot, and cell imaging assays focused on centrosome dynamics and mitotic control.

Application Notes

Optimal dilution of the SASS6 antibody should be determined by the researcher.

Immunogen

E.coli-derived human SASS6 recombinant protein (Position: E101-S657) was used as the immunogen for the SASS6 antibody.

Storage

After reconstitution, the SASS6 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.