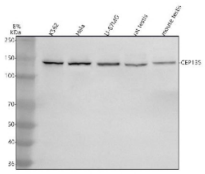
CEP135 Antibody / Centrosomal protein 135 (FY12289)

Catalog No.	Formulation	Size
FY12289	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
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	Q66GS9
Applications	Western Blot: 0.25-0.5ug/ml ELISA: 0.1-0.5ug/ml
Limitations	This CEP135 antibody is available for research use only.



Western blot analysis of CEP135 using anti-CEP135 antibody. Lane 1: human K562 whole cell lysates, Lane 2: human Hela whole cell lysates, Lane 3: human U-87MG whole cell lysates, Lane 4: rat testis tissue lysates, Lane 5: mouse testis tissue 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-CEP135 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 enhanced chemiluminescent. The predicted molecular weight of CEP135 is ~133 kDa, commonly observed at ~135 kDa.

Description

CEP135 antibody detects Centrosomal protein of 135 kDa, encoded by the CEP135 gene on chromosome 4q12. CEP135 antibody is widely used in studies of centrosome biology, microtubule organization, and cell division. CEP135 is a core centrosomal protein that contributes to centriole structure and duplication, essential processes for accurate chromosome segregation during mitosis. It is a scaffold protein that supports assembly of other centriolar proteins and contributes to

centrosome maturation.

Structurally, CEP135 is a ~135 kDa coiled-coil protein localized to the proximal region of centrioles. It interacts with structural proteins such as SAS-6, CPAP, and STIL, which regulate centriole duplication and elongation. CEP135 provides a platform for organizing microtubule triplets and stabilizing centriole structure.

Functionally, CEP135 is required for proper centriole biogenesis, centrosome integrity, and spindle assembly. Loss of CEP135 leads to abnormal centriole structure, defective spindle formation, and chromosomal instability. Researchers use CEP135 antibody to study cell cycle regulation, centrosome duplication, and mechanisms of chromosomal segregation.

Clinically, mutations in CEP135 are linked to primary microcephaly, a neurodevelopmental disorder caused by defective centrosome function. CEP135 deficiency results in reduced brain size due to impaired neural progenitor proliferation. Dysregulation of centrosome proteins including CEP135 has also been associated with cancer, where centrosome amplification contributes to genomic instability. NSJ Bioreagents provides CEP135 antibody for research in neurodevelopment, cell cycle regulation, and oncology.

Experimentally, CEP135 antibody is used in western blotting to detect the ~135 kDa protein, in immunofluorescence to visualize centrosomal localization, and in immunohistochemistry to analyze tissue-specific expression. Co-immunoprecipitation with CEP135 antibody identifies interaction partners such as SAS-6 and CPAP.

Application Notes

Optimal dilution of the CEP135 antibody should be determined by the researcher.

Immunogen

E.coli-derived human CEP135 recombinant protein (Position: E28-E1034) was used as the immunogen for the CEP135 antibody.

Storage

After reconstitution, the CEP135 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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