

CENPJ (S-20): sc-66747

BACKGROUND

CENPJ (CPAP) is a centromeric protein that plays a role in brain size. The protein contains five coiled-coil domains, the most C-terminal of which includes a leucine zipper motif. CENPJ also has several potential protein phosphorylation sites and a C-terminal domain containing 21 nonamer G-box repeats. The CENPJ gene is expressed in neuroepithelium during prenatal neurogenesis, and it localizes to the spindle poles of cells undergoing mitosis. This localization suggests that a centrosomal mechanism controls neuron number in the developing mammalian brain. Mutations in the CENPJ gene have been linked to the condition autosomal recessive primary microcephaly. A novel 4 bp deletion in the gene has been characterized as a cause of protein truncation leading to the condition.

REFERENCES

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- Triebel, F., et al. 2003. LAG-3: a regulator of T cell and DC responses and its use in therapeutic vaccination. *Trends Immunol.* 24: 619-622.
- Hung, L.Y., et al. 2004. Identification of a novel microtubule-destabilizing motif in CPAP that binds to tubulin heterodimers and inhibits microtubule assembly. *Mol. Biol. Cell* 15: 2697-2706.
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- Cho, J.H., et al. 2006. Depletion of CPAP by RNAi disrupts centrosome integrity and induces multipolar spindles. *Biochem. Biophys. Res. Commun.* 339: 742-747.

CHROMOSOMAL LOCATION

Genetic locus: CENPJ (human) mapping to 13q12.12; Cenpj (mouse) mapping to 14 C3.

SOURCE

CENPJ (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CENPJ of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-66747 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

CENPJ (S-20) is recommended for detection of CENPJ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CENPJ siRNA (h): sc-62090, CENPJ siRNA (m): sc-62091, CENPJ shRNA Plasmid (h): sc-62090-SH, CENPJ shRNA Plasmid (m): sc-62091-SH, CENPJ shRNA (h) Lentiviral Particles: sc-62090-V and CENPJ shRNA (m) Lentiviral Particles: sc-62091-V.

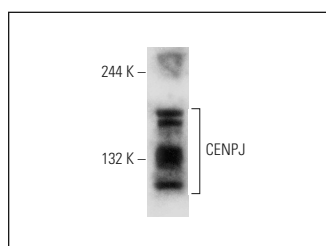
Molecular Weight of CENPJ: 150 kDa.

Positive Controls: F9 cell lysate: sc-2245, mouse testis extract: sc-2405 or rat testis extract: sc-2400.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CENPJ (S-20): sc-66747. Western blot analysis of CENPJ expression in F9 whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.



Try **CENPJ (E-12): sc-166113** or **CENPJ (95.381.1): sc-81432**, our highly recommended monoclonal alternatives to CENPJ (S-20).