

NEDD1 (Y-16): sc-54127

BACKGROUND

NEDD1 (neural precursor cell expressed, developmentally downregulated 1), also known as GCP-WD, is a homolog of the *Drosophila* protein known as Dgp71WD. It is a ubiquitously expressed, evolutionarily conserved protein and contains eight WD40 repeats and a coiled-coil domain at the C-terminus. NEDD1 is a subunit of the γ -Tubulin ring complex (γ TuRC) and plays an important role in mitosis. During mitosis NEDD1 is phosphorylated and functions in forming the association of γ Tubulin with the spindle. The state of phosphorylation of NEDD1 is also important for determining its cellular localization. NEDD1 is responsible for targeting γ TuRC to the centrosome and spindle and is therefore required for centrosomal and chromatin-mediated microtubule nucleation. The inhibition of NEDD1 results in the loss of γ TuRC from the centrosome and a sequential loss of microtubule nucleation. Due to its critical role in mitosis, NEDD1 may be a potential target for anticancer therapies.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NEDD1 (human) mapping to 12q23.1; Nedd1 (mouse) mapping to 10 C2.

SOURCE

NEDD1 (Y-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NEDD1 of mouse 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-54127 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NEDD1 (Y-16) is recommended for detection of NEDD1 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).

NEDD1 (Y-16) is also recommended for detection of NEDD1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for NEDD1 siRNA (h): sc-72378, NEDD1 siRNA (m): sc-72379, NEDD1 shRNA Plasmid (h): sc-72378-SH, NEDD1 shRNA Plasmid (m): sc-72379-SH, NEDD1 shRNA (h) Lentiviral Particles: sc-72378-V and NEDD1 shRNA (m) Lentiviral Particles: sc-72379-V.

Molecular Weight of NEDD1: 74 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

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.

STORAGE

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

RESEARCH USE

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


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Satisfaction
Guaranteed

Try **NEDD1 (H-3): sc-398733** or **NEDD1 (39-J): sc-100961**, our highly recommended monoclonal alternatives to NEDD1 (Y-16).