SANTA CRUZ BIOTECHNOLOGY, INC.

NEDD4-L (C-12): sc-390628

BACKGROUND

NEDD4-L (neural precursor cell expressed, developmentally down-regulated 4-like), also known as RSP5, NEDD4-2 or NEDL3, is a 975 amino acid protein that localizes to the cytoplasm and contains 4 WW domains, one HECT domain and one C2 domain. Expressed ubiquitously with highest expression in pancreas, prostate and kidney, NEDD4-L functions as an E3 ubiquitin-protein ligase that, characteristic of E3 ligase proteins, accepts ubiquitin (in the form of a thioester) from an E2 ubiquitin-conjugating enzyme and transfers that ubiquitin residue to substrates targeted for degradation. Through its ability to ubiquitinate and induce the proteasome-dependent degradation of proteins such as Smad2 and TGFβ RII, NEDD4-L is thought to inhibit the TGFβ signaling pathway, thereby regulating the signaling pathways that control cell growth and differentiation. NEDD4-L is expressed as eight isoforms due to alternative splicing events.

REFERENCES

1. Chen, H., et al. 2001. NEDD4L on human chromosome 18q21 has multiple forms of transcripts and is a homologue of the mouse Nedd4-2 gene. Eur. J. Hum. Genet. 9: 922-930.
2. Harvey, K.F., et al. 2002. N4WBP5, a potential target for ubiquitination by the Nedd4 family of proteins, is a novel Golgi-associated protein. J. Biol. Chem. 277: 9307-9317.
3. Qi, H., et al. 2003. Androgens differentially regulate the expression of NEDD4L transcripts in LNCaP human prostate cancer cells. Mol. Cell. Endocrinol. 210: 51-62.
4. van Bemmelen, M.X., et al. 2004. Cardiac voltage-gated sodium channel $Na_v1.5$ is regulated by Nedd4-2 mediated ubiquitination. Circ. Res. 95: 284-291.

CHROMOSOMAL LOCATION

Genetic locus: NEDD4L (human) mapping to 18q21.31; Nedd4l (mouse) mapping to 18 E1.

SOURCE

NEDD4-L (C-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 238-273 within an internal region of NEDD4-L of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-390628 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

NEDD4-L (C-12) is recommended for detection of NEDD4-L of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

NEDD4-L (C-12) is also recommended for detection of NEDD4-L in additional species, including bovine and porcine.

Suitable for use as control antibody for NEDD4-L siRNA (h): sc-75894, NEDD4-L siRNA (m): sc-149898, NEDD4-L shRNA Plasmid (h): sc-75894-SH, NEDD4-L shRNA Plasmid (m): sc-149898-SH, NEDD4-L shRNA (h) Lentiviral Particles: sc-75894-V and NEDD4-L shRNA (m) Lentiviral Particles: sc-149898-V.

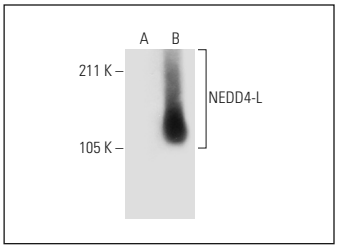
Molecular Weight of NEDD4-L: 112 kDa.

Positive Controls: NEDD4-L (h2): 293T Lysate: sc-173451.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



NEDD4-L (C-12): sc-390628. Western blot analysis of NEDD4-L expression in non-transfected: sc-117752 (**A**) and human NEDD4-L transfected: sc-173451 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Wang, H., et al. 2021. Distinct and overlapping roles of Hippo effectors YAP and TAZ during human and mouse hepatocarcinogenesis. Cell. Mol. Gastroenterol. Hepatol. 11: 1095-1117.

RESEARCH USE

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