# SANTA CRUZ BIOTECHNOLOGY, INC.

# NEDD4-L (I-17): sc-85081



# BACKGROUND

NEDD4-L (neural precursor cell expressed, developmentally downregulated 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 TGF $\beta$  RII, NEDD4-L is thought to inhibit the TGF $\beta$  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.

# CHROMOSOMAL LOCATION

Genetic locus: NEDD4L (human) mapping to 18q21.31; Nedd4I (mouse) mapping to 18 E1.

# SOURCE

NEDD4-L (I-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of NEDD4-L of human origin.

#### PRODUCT

Each vial contains 100  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85081 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# APPLICATIONS

NEDD4-L (I-17) is recommended for detection of NEDD4-L of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with NEDD4 and NEDD4-1.

NEDD4-L (I-17) is also recommended for detection of NEDD4-L in additional species, including equine, canine, bovine, porcine and avian.

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.

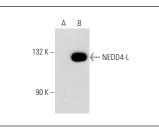
Molecular Weight of NEDD4-L: 112 kDa.

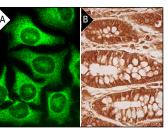
Positive Controls: NEDD4-L (h): 293T Lysate: sc-115253, Jurkat whole cell lysate: sc-2204 or Caki-1 cell lysate: sc-2224.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz<sup>™</sup>: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA





NEDD4-L (I-17): sc-85081. Western blot analysis of NEDD4-L expression in non-transfected: sc-117752 (A) and human NEDD4-L transfected: sc-115253 (B) 293T whole cell lysates.

NEDD4-L (I-17): sc-85081. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing cytoplasmic and nuclear staining of glandular cells (B).

#### SELECT PRODUCT CITATIONS

 Wei, C., et al. 2015. Involvement of general control nonderepressible kinase 2 in cancer cell apoptosis by posttranslational mechanisms. Mol. Biol. Cell 26: 1044-1057.

#### **STORAGE**

Store at 4° C, \*\*D0 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.

#### PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

# MONOS Satisfation Guaranteed

Try NEDD4-L (C-8): sc-514954 or NEDD4-L (C-12): sc-390628, our highly recommended monoclonal alternatives to NEDD4-L (I-17).