

NEDL2 (I-14): sc-168731

BACKGROUND

NEDL2 (NEDD4-like E3 ubiquitin-protein ligase 2), also known as HECW2 (HECT, C2 and WW domain containing E3 ubiquitin protein ligase 2), is a 1,572 amino acid cytoplasmic protein that is involved in protein modification and ubiquitination and exists as 2 alternatively spliced isoforms. NEDL2 acts as an E3 ubiquitin-protein ligase that enhances p73 transcription activation, ubiquitination and stabilization, and is highly expressed in adult heart, lung and brain. Containing one C2 domain, two WW domains and a single HECT (E6AP-type E3 ubiquitin-protein ligase) domain, NEDL2 is encoded by a gene that maps to human chromosome 2, which consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2 including Harlequin ichthyosis, sitosterolemia and Alström syndrome.

REFERENCES

1. Patel, S.B., et al. 1998. Mapping a gene involved in regulating dietary cholesterol absorption. The sitosterolemia locus is found at chromosome 2p21. *J. Clin. Invest.* 102: 1041-1044.
2. Shulenin, S., et al. 2001. An ATP-binding cassette gene (ABCG5) from the ABCG (White) gene subfamily maps to human chromosome 2p21 in the region of the Sitosterolemia locus. *Cytogenet. Cell Genet.* 92: 204-208.
3. Hearn, T., et al. 2002. Mutation of ALMS1, a large gene with a tandem repeat encoding 47 amino acids, causes Alström syndrome. *Nat. Genet.* 31: 79-83.
4. Miyazaki, K., et al. 2003. A novel HECT-type E3 ubiquitin ligase, NEDL2, stabilizes p73 and enhances its transcriptional activity. *Biochem. Biophys. Res. Commun.* 308: 106-113.
5. Kelsell, D.P., et al. 2005. Mutations in ABCA12 underlie the severe congenital skin disease harlequin ichthyosis. *Am. J. Hum. Genet.* 76: 794-803.
6. Oberst, A., et al. 2005. Regulation of the p73 protein stability and degradation. *Biochem. Biophys. Res. Commun.* 331: 707-712.

CHROMOSOMAL LOCATION

Genetic locus: HECW2 (human) mapping to 2q32.3; Hecw2 (mouse) mapping to 1 C1.1.

SOURCE

NEDL2 (I-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NEDL2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168731 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

NEDL2 (I-14) is recommended for detection of NEDL2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with NEDL1.

NEDL2 (I-14) is also recommended for detection of NEDL2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for NEDL2 siRNA (h): sc-95007, NEDL2 siRNA (m): sc-149900, NEDL2 shRNA Plasmid (h): sc-95007-SH, NEDL2 shRNA Plasmid (m): sc-149900-SH, NEDL2 shRNA (h) Lentiviral Particles: sc-95007-V and NEDL2 shRNA (m) Lentiviral Particles: sc-149900-V.

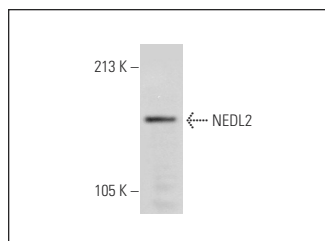
Molecular Weight of NEDL2: 176 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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



NEDL2 (I-14): sc-168731. Western blot analysis of NEDL2 expression in Hep G2 whole cell lysate.

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.