

# Anti-NEDD4-2 NEDD4L Rabbit Monoclonal Antibody

Catalog # ABO13899

#### Specification

## Anti-NEDD4-2 NEDD4L Rabbit Monoclonal Antibody - Product Information

Application WB. IP **Primary Accession Q96PU5** Rabbit Host Isotype Rabbit IgG Reactivity Rat, Human, Mouse Monoclonal Clonality Format Liquid Description Anti-NEDD4-2 NEDD4L Rabbit Monoclonal Antibody . Tested in WB, IP applications. This antibody

#### Anti-NEDD4-2 NEDD4L Rabbit Monoclonal Antibody - Additional Information

Gene ID 23327

**Other Names** E3 ubiquitin-protein ligase NEDD4-like, 2.3.2.26, 2.3.2.36, HECT-type E3 ubiquitin transferase NED4L, NEDD4.2, Nedd4-2, NEDD4L {ECO:0000303|PubMed:11840194}

Calculated MW 111932 MW KDa

Application Details WB 1:5000-1:20000<br>IP 1:50

reacts with Human, Mouse, Rat.

**Subcellular Localization** Cytoplasm. May be recruited to exosomes by NDFIP1.

Tissue Specificity

Ubiquitously expressed, with highest levels in prostate, pancreas and kidney (PubMed:14615060, PubMed:15496141, PubMed:19664597). Expressed in melanocytes (PubMed:23999003)..

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human NEDD4-2

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for



up to one month. Avoid repeated freeze-thaw cycles.

### Anti-NEDD4-2 NEDD4L Rabbit Monoclonal Antibody - Protein Information

Name NEDD4L {ECO:0000303|PubMed:11840194}

Function

E3 ubiquitin-protein ligase that mediates the polyubiquitination of lysine and cysteine residues on target proteins and is thereby implicated in the regulation of various signaling pathways including autophagy, innate immunity or DNA repair (PubMed:<a

href="http://www.uniprot.org/citations/20064473" target="\_blank">20064473</a>, PubMed:<a href="http://www.uniprot.org/citations/31959741" target="\_blank">31959741</a>, PubMed:<a href="http://www.uniprot.org/citations/33608556" target="\_blank">33608556</a>). Inhibits TGF-beta signaling by triggering SMAD2 and TGFBR1 ubiquitination and proteasome- dependent degradation (PubMed:<a href="http://www.uniprot.org/citations/15496141"

target="\_blank">15496141</a>). Downregulates autophagy and cell growth by ubiquitinating and reducing cellular ULK1 or ASCT2 levels (PubMed:<a

href="http://www.uniprot.org/citations/28820317" target="\_blank">28820317</a>, PubMed:<a href="http://www.uniprot.org/citations/31959741" target="\_blank">31959741</a>). Promotes ubiguitination and internalization of various plasma membrane channels such as ENaC,

SCN2A/Nav1.2, SCN3A/Nav1.3, SCN5A/Nav1.5, SCN9A/Nav1.7, SCN10A/Nav1.8, KCNA3/Kv1.3, KCNH2, EAAT1, KCNQ2/Kv7.2, KCNQ3/Kv7.3 or CLC5 (PubMed:<a

href="http://www.uniprot.org/citations/26363003" target="\_blank">26363003</a>, PubMed:<a href="http://www.uniprot.org/citations/27445338" target="\_blank">27445338</a>). Promotes ubiquitination and degradation of SGK1 and TNK2. Ubiquitinates BRAT1 and this ubiquitination is enhanced in the presence of NDFIP1 (PubMed:<a

href="http://www.uniprot.org/citations/25631046" target="\_blank">25631046</a>). Plays a role in dendrite formation by melanocytes (PubMed:<a

href="http://www.uniprot.org/citations/23999003" target="\_blank">23999003</a>). Involved in the regulation of TOR signaling (PubMed:<a href="http://www.uniprot.org/citations/27694961" target="\_blank">27694961</a>). Ubiquitinates and regulates protein levels of NTRK1 once this one is activated by NGF (PubMed:<a href="http://www.uniprot.org/citations/27445338" target="\_blank">27445338</a>). Plays a role in antiviral innate immunity by catalyzing 'Lys-29'-linked cysteine ubiquitination of TRAF3, resulting in enhanced 'Lys-48' and 'Lys-63'-linked ubiquitination of TRAF3 (PubMed:<a href="http://www.uniprot.org/citations/33608556" target="\_blank">33608556</a>). Ubiquitinates TTYH2 and TTYH3 and regulates protein levels of TTYH2 (PubMed:<a href="http://www.uniprot.org/citations/18577513" target="\_blank">18577513</a>).

**Cellular Location** 

Cytoplasm. Golgi apparatus. Endosome, multivesicular body. Note=May be recruited to exosomes by NDFIP1

**Tissue Location** 

Ubiquitously expressed, with highest levels in prostate, pancreas, and kidney (PubMed:14615060, PubMed:15496141, PubMed:19664597). Expressed in melanocytes (PubMed:23999003)

#### Anti-NEDD4-2 NEDD4L Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides



- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-NEDD4-2 NEDD4L Rabbit Monoclonal Antibody - Images



Western blot analysis of NEDD4-2 expression in mouse spleen tissue.



Figure 1. Western blot analysis of NEDD4L using anti-NEDD4L antibody (M01595).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human K562 whole cell lysates,

Lane 2: human Hela whole cell lysates,

Lane 3: human RT4 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-NEDD4L antigen affinity purified monoclonal antibody (Catalog # M01595) at 1:5000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes



each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for NEDD4L at approximately 130 kDa. The expected band size for NEDD4L is at 112 kDa.