10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NEDD4-2 Antibody

Rabbit mAb
Catalog # AP90733

Product Information

Application	WB, IP
Primary Accession	Q96PU5
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	E3 ubiquitin protein ligase NEDD4 like protein; KIAA0439; NEDD4 2; NEDD4 2c; Nedd4-2; NEDD4-2a; NEDD4b; NEDD4L; NEDL3; RSP5;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	111932

Additional Information

Dilution	WB 1:5000~1:20000 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human NEDD4-2
Description	NEDD4 was originally identified as a gene that is highly expressed in the early mouse embryonic central nervous system. E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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:20064473, PubMed:31959741, PubMed:33608556). Inhibits TGF-beta signaling by triggering SMAD2 and TGFBR1 ubiquitination and proteasome- dependent degradation (PubMed:15496141). Downregulates autophagy and cell growth by ubiquitinating and reducing cellular ULK1 or ASCT2 levels (PubMed:28820317, PubMed:31959741). Promotes ubiquitination 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:26363003, PubMed:27445338). Promotes ubiquitination and degradation of SGK1 and TNK2. Ubiquitinates BRAT1 and this ubiquitination is enhanced in the presence of NDFIP1

(PubMed:25631046). Plays a role in dendrite formation by melanocytes (PubMed:23999003). Involved in the regulation of TOR signaling (PubMed:27694961). Ubiquitinates and regulates protein levels of NTRK1 once this one is activated by NGF (PubMed:27445338). 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:33608556). Ubiquitinates TTYH2 and TTYH3 and regulates protein levels of TTYH2 (PubMed:18577513).

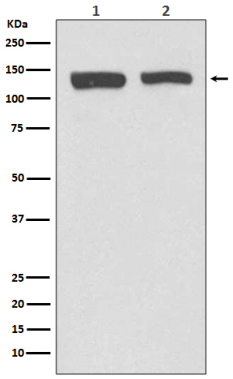
Cellular Location

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)

Images



Western blot analysis of NEDD4-2 expression in (1) K562 cell lysate; (2) HeLa cell lysate.