

## NEDD4 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP9934b

## **Specification**

## NEDD4 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

P46934

# NEDD4 Antibody (C-term) Blocking Peptide - Additional Information

**Gene ID 4734** 

### **Other Names**

E3 ubiquitin-protein ligase NEDD4, 632-, Cell proliferation-inducing gene 53 protein, Neural precursor cell expressed developmentally down-regulated protein 4, NEDD-4, NEDD4, KIAA0093, NEDD4-1

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# NEDD4 Antibody (C-term) Blocking Peptide - Protein Information

Name NEDD4

Synonyms KIAA0093, NEDD4-1, RPF1 {ECO:0000303|Pub

## **Function**

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. Specifically ubiquitinates 'Lys-63' in target proteins (PubMed:<a

href="http://www.uniprot.org/citations/23644597" target="\_blank">23644597</a>, PubMed:<a href="http://www.uniprot.org/citations/21399620" target="\_blank">21399620</a>, PubMed:<a href="http://www.uniprot.org/citations/19920177" target="\_blank">19920177</a>). Involved in the pathway leading to the degradation of VEGFR-2/KDFR, independently of its ubiquitin-ligase activity. Monoubiquitinates IGF1R at multiple sites, thus leading to receptor internalization and degradation in lysosomes (By similarity). Ubiquitinates FGFR1, leading to receptor internalization and degradation in lysosomes (PubMed:<a href="http://www.uniprot.org/citations/21765395" target="\_blank">21765395</a>). Promotes ubiquitination of RAPGEF2 (PubMed:<a href="http://www.uniprot.org/citations/11598133" target="\_blank">11598133</a>, A>). According to PubMed:<a href="http://www.uniprot.org/citations/18562292" target="\_blank">18562292</a> the direct link between NEDD4 and PTEN regulation through polyubiquitination described in



PubMed:<a href="http://www.uniprot.org/citations/17218260" target="\_blank">17218260</a> is questionable. Involved in ubiquitination of ERBB4 intracellular domain E4ICD (By similarity). Part of a signaling complex composed of NEDD4, RAP2A and TNIK which regulates neuronal dendrite extension and arborization during development (By similarity). Ubiquitinates TNK2 and regulates EGF-induced degradation of EGFR and TNF2 (PubMed:<a

href="http://www.uniprot.org/citations/20086093" target="\_blank">20086093</a>). 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>). Ubiquitinates DAZAP2, leading to its proteasomal degradation (PubMed:<a

href="http://www.uniprot.org/citations/11342538" target="\_blank">11342538</a>). Ubiquitinates POLR2A (PubMed:<a href="http://www.uniprot.org/citations/19920177"

target="\_blank">19920177</a>). Functions as a platform to recruit USP13 to form an NEDD4-USP13 deubiquitination complex that plays a critical role in cleaving the 'Lys-48'-linked ubiquitin chains of VPS34 and then stabilizing VPS34, thus promoting the formation of autophagosomes (PubMed:<a href="http://www.uniprot.org/citations/32101753" target="blank">32101753</a>).

### **Cellular Location**

Cytoplasm. Nucleus. Cell membrane {ECO:0000250|UniProtKB:P46935}; Peripheral membrane protein {ECO:0000250|UniProtKB:P46935}. Note=Predominantly cytoplasmic but also located in the nucleus (PubMed:11342538). Recruited to the plasma membrane by GRB10. Once complexed with GRB10 and IGF1R, follows IGF1R internalization, remaining associated with early endosomes. Uncouples from IGF1R-containing endosomes before the sorting of the receptor to the lysosomal compartment (By similarity). May be recruited to exosomes by NDFIP1 (PubMed:18819914). {ECO:0000250|UniProtKB:P46935, ECO:0000269|PubMed:11342538, ECO:0000269|PubMed:18819914}

## NEDD4 Antibody (C-term) Blocking Peptide - Protocols

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

## • Blocking Peptides

NEDD4 Antibody (C-term) Blocking Peptide - Images

# NEDD4 Antibody (C-term) Blocking Peptide - Background

Nedd4 is one of a group of mouse genes that show developmentally regulated expression in mouse embryonic brain. Nedd4 is expressed in various other embryonic tissues and persists in most adult tissues.

### NEDD4 Antibody (C-term) Blocking Peptide - References

Lin, Q., et al. Mol. Cell. Biol. 30(6):1541-1554(2010)Crowther-Swanepoel, D., et al. Nat. Genet. 42(2):132-136(2010)Edwin, F., et al. J. Biol. Chem. 285(1):255-264(2010)Guo, Y.Y., et al. Zhongguo Yi Xue Ke Xue Yuan Xue Bao 31(6):679-685(2009)