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Recombinant Anti-NEDD4 Rabbit mAb

Catalog # AP95187

Product Information

Application	WB, FC, IP
Primary Accession	P46934
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal
Calculated MW	149114

Additional Information

Gene ID	4734
Other Names	KIAA0093; NEDD4-1; E3 ubiquitin-protein ligase NEDD4; Cell proliferation-inducing gene 53 protein; Neural precursor cell expressed developmentally down-regulated protein 4; NEDD-4
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human NEDD4 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) FC~~1:10~50 IP~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

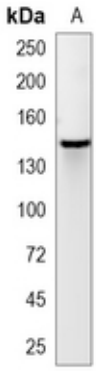
Name	NEDD4
Synonyms	KIAA0093, NEDD4-1, RPF1 {ECO:0000303|Pub
Function	E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Specifically ubiquitinates 'Lys-63' in target proteins (PubMed:19920177, PubMed:21399620, PubMed:23644597). 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:21765395). Promotes ubiquitination of RAPGEF2 (PubMed:11598133). According to PubMed:18562292 the direct link between NEDD4 and PTEN regulation through polyubiquitination described in PubMed:17218260 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:20086093). Ubiquitinates BRAT1 and this ubiquitination is enhanced in the presence of NDFIP1 (PubMed:25631046). Ubiquitinates DAZAP2, leading to its proteasomal degradation (PubMed:11342538). Ubiquitinates POLR2A (PubMed:19920177). 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:32101753).

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}

Images



Western blot analysis of NEDD4 expression in A549 (A) whole cell lysates. (Predicted band size: 149 kD; Observed band size: 135 kD)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.