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NEDD8 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1226a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q15843
Other Accession	Q71UE8, Q4PLJ0, P29595, P61282
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Mouse, Rabbit, Rat, Canine, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB0639
Calculated MW	9072
Antigen Region	1-32

Additional Information

Gene ID	4738
Other Names	NEDD8, Neddylin, Neural precursor cell expressed developmentally down-regulated protein 8, NEDD-8, Ubiquitin-like protein Nedd8, NEDD8
Target/Specificity	This NEDD8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-32 amino acids from the N-terminal region of human NEDD8.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NEDD8 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NEDD8 {ECO:0000303|PubMed:9694792, ECO:0000312|HGNC:HGNC:7732}
Function	Ubiquitin-like protein which plays an important role in cell cycle control and embryogenesis via its conjugation to a limited number of cellular proteins,

	such as cullins or p53/TP53 (PubMed:10318914, PubMed:10597293, PubMed:11953428, PubMed:14690597, PubMed:15242646, PubMed:9694792, PubMed:38605244, PubMed:38316879). Attachment of NEDD8 to cullins is critical for the recruitment of E2 to the cullin-RING- based E3 ubiquitin-protein ligase complex, thus facilitating polyubiquitination and proteasomal degradation of cyclins and other regulatory proteins (PubMed:10318914, PubMed:10597293, PubMed:11953428, PubMed:20688984, PubMed:9694792, PubMed:38605244, PubMed:38316879). Attachment of NEDD8 to p53/TP53 inhibits p53/TP53 transcriptional activity (PubMed:15242646). Covalent attachment to its substrates requires prior activation by the E1 complex UBE1C-APPBP1 and linkage to the E2 enzyme UBE2M (PubMed:14690597). Neddylates EGFR resulting in protein stabilization and translocation to the cell membrane (PubMed:28891468).
Cellular Location	Nucleus. Note=Mainly nuclear.
Tissue Location	Highly expressed in heart, skeletal muscle, spleen, thymus, prostate, testis, ovary, colon and leukocytes

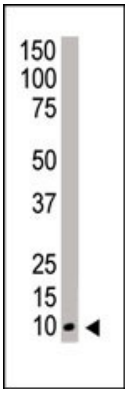
Background

NEDD8 is a ubiquitin-like protein which plays an important role in cell cycle control and embryogenesis. Covalent attachment to its substrates requires prior activation by the E1 complex UBE1C-APPBP1 and linkage to the E2 enzyme UBE2M. Attachment of NEDD8 to cullins activates their associated E3 ubiquitin ligase activity, and thus promotes polyubiquitination and proteasomal degradation of cyclins and other regulatory proteins.

References

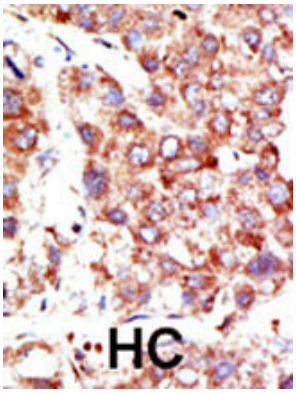
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Images



Western blot analysis of NEDD8 polyclonal antibody (Cat. #AP1226a) in HeLa cell lysate. NEDD8 (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical



relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

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